CHAMPLIN FIGHTS THE PURPLE GOD By Don Wilcox

VOLUME 14 NUMBER 3

See BACK COVER

AMAZING STORIES

SEPTEMBER
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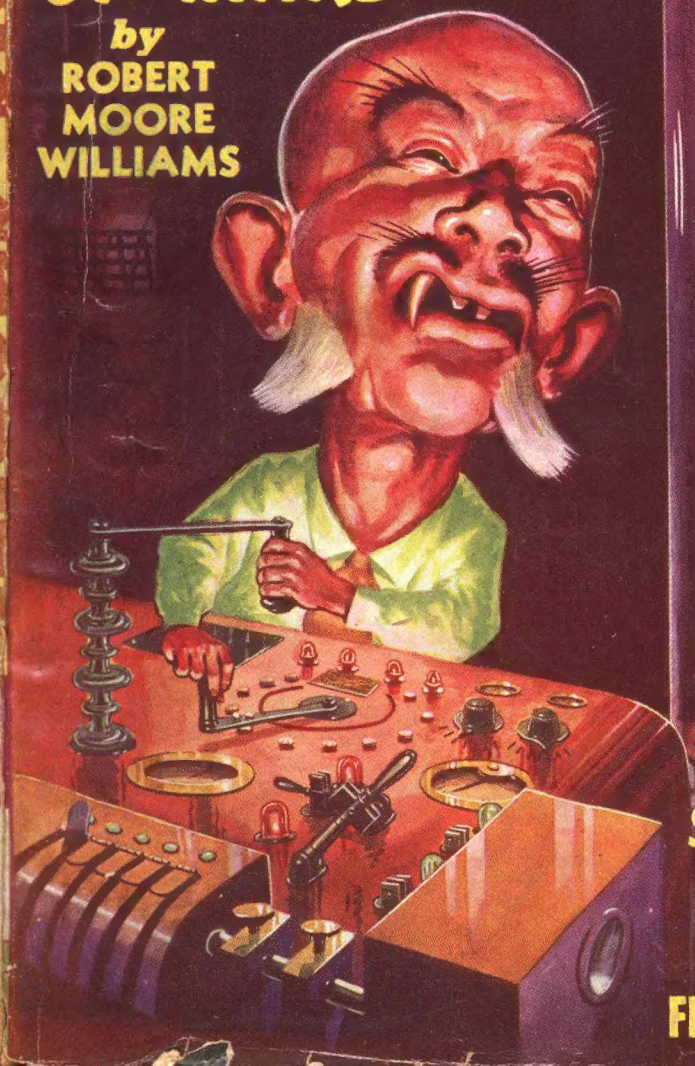
FIFTH COLUMN OF MARS

by ROBERT MOORE WILLIAMS



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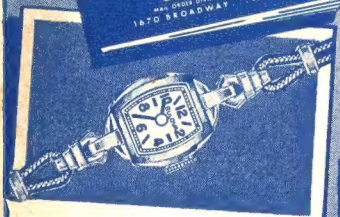

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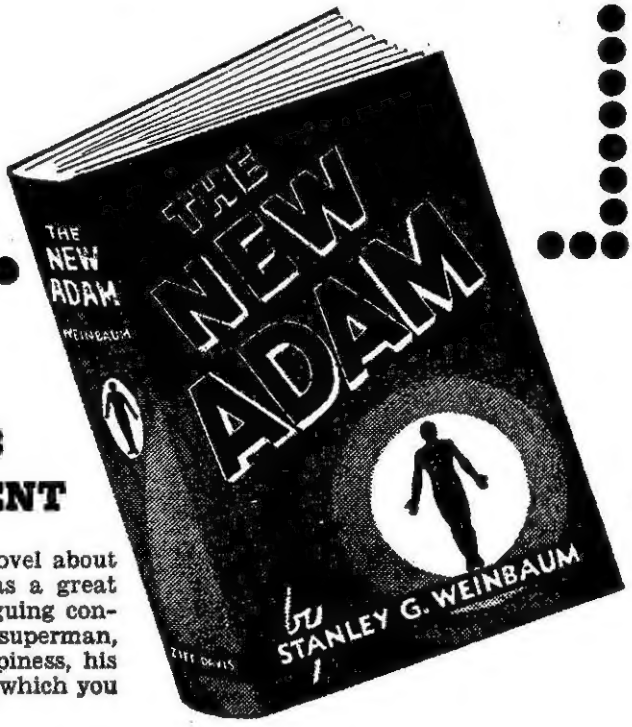

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SEPTEMBER
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AMAZING STORIES

VOLUME 14
NUMBER 9

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Front cover painting by Robert Fuqua depicting a scene from **Fifth Column of Mars**
Back cover painting by Frank R. Paul depicting **Life on Europa**

Illustrations by Julian S. Krupa, Robert Fuqua, R. Newman, Guy Gifford

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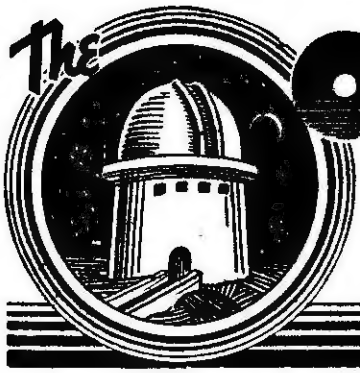
Number 9

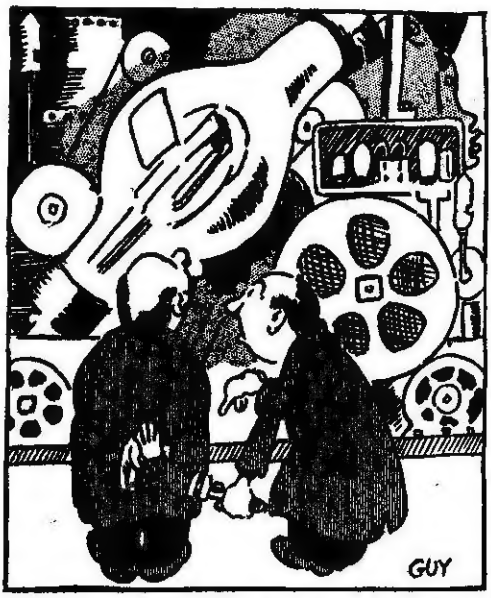


The OBSERVATORY by THE Editor

TO start off this month's editorial observations, we'll reveal an intimate glimpse behind the scenes of AMAZING STORIES' art department.

As an example, we'll use Eando Binder, who recently dropped in from New York, as the lead character. Mr. Binder stands before a row of four finished science-fiction paintings. He studies them for a few minutes, then he points to one and says: "I think I'd like to do that story."

That little scene, readers, reveals exactly how almost *all* our cover stories have been written in the past six months. And we think this method, the reverse of the usual procedure, is so successful that we will continue it in the future.



"Twenty years of hard work, and now I can't remember what the darn thing's supposed to be."

WE wonder whether this is the reason for so many writers paying us personal visits recently. Among the other authors who paid us visits were Robert Moore Williams, David Wright O'Brien, Jack West, Stanton A. Coblentz, Ralph Milne Farley, Robert Bloch, August W. Derleth, James Norman and Richard O. Lewis.

A NOTE of national interest is struck from the news that Robert Bloch, long acclaimed by AMAZING STORIES' readers as the "idea man" of science fiction, and author of many off-trail stories, is public relations consultant for the famous "blitzkrieg kid", Carl Zeidler, who overthrew the traditional Hoan "dynasty" in the "beer-barrel revolt" in Milwaukee's recent sensational mayoralty election.

Bloch's "scientific psychology" attack crumpled the Hoan campaign like tissue paper. He and his associate, Harold Gauer, amazed staid Milwaukee politics with their literally science-fiction tactics.

NOT to make this column a political listening post, but one of our staff members received a nice letter the other day from Thomas D. "Tom" Taggart, Mayor of Atlantic City, N. J. Mayor Taggart's note was in reply to a message of congratulations sent him on his recent election.

It is in Atlantic City that Abner J. Gelula, last seen in our pages with "The Whistling Death" in our June '39 issue, carries on both his fictional and his political work. This is by way of public notice that now the mayors have been taken care of, we'd like to see more of his fiction for AMAZING STORIES.

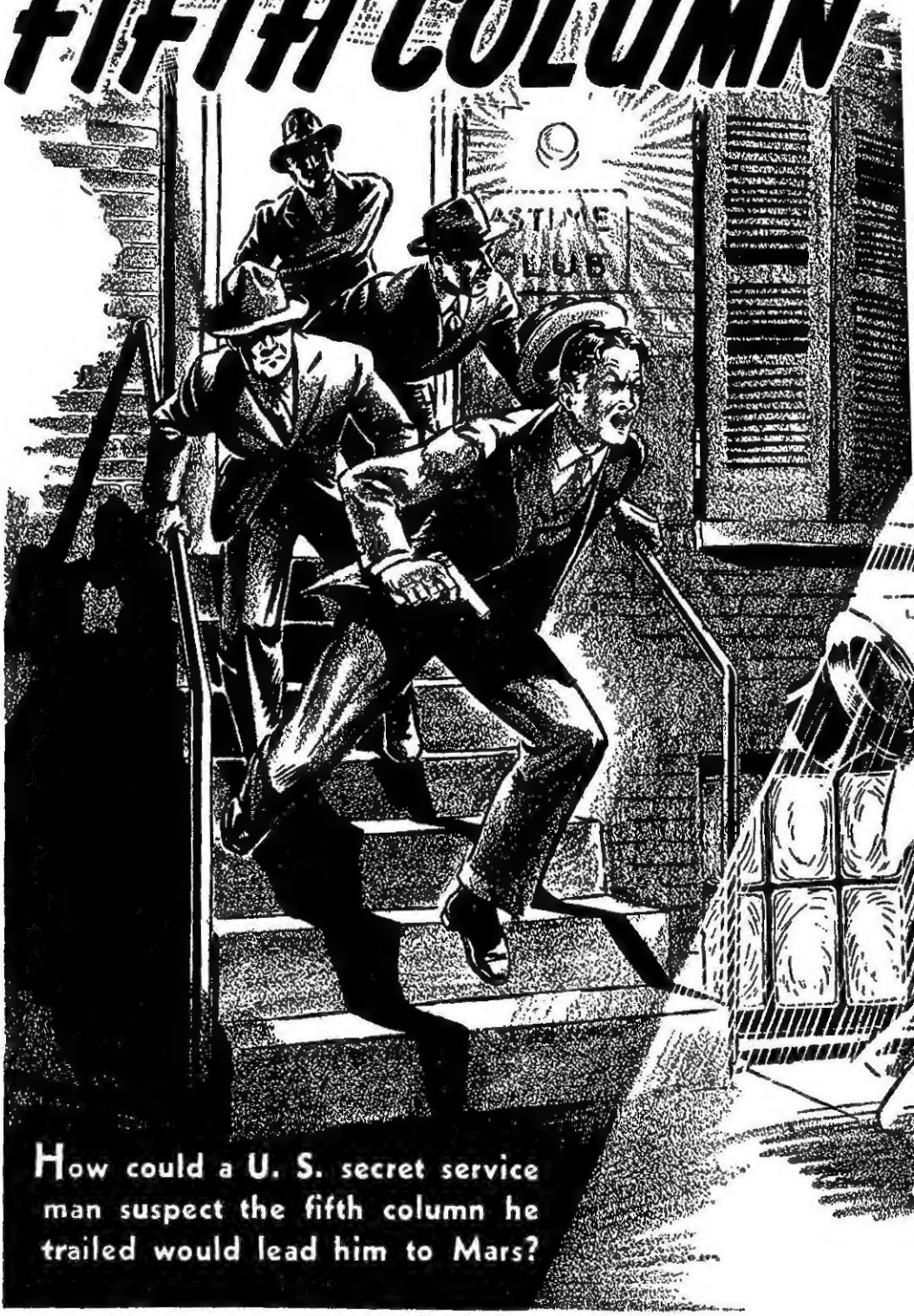
IT is with the greatest regret that we learn of the death on June 12th of one of the most powerful figures in weird, amazing, and fantastic fiction of the past decade, Farnsworth Wright, editor and author.

Many of the truly great science-fiction stories owe their existence to the masterly touch of this amazing man, and many an author will miss his guiding hand.

JEP POWELL, who writes as his first fictional attempt, "The Synthetic Woman" in this issue, is the subject of our thumbnail autobiography in the Meet The Authors department this month. We think it's a humdinger. And you fellow readers?

(Continued on page 83)

FIFTH COLUMN



OF MARS

BY ROBERT MOORE WILLIAMS

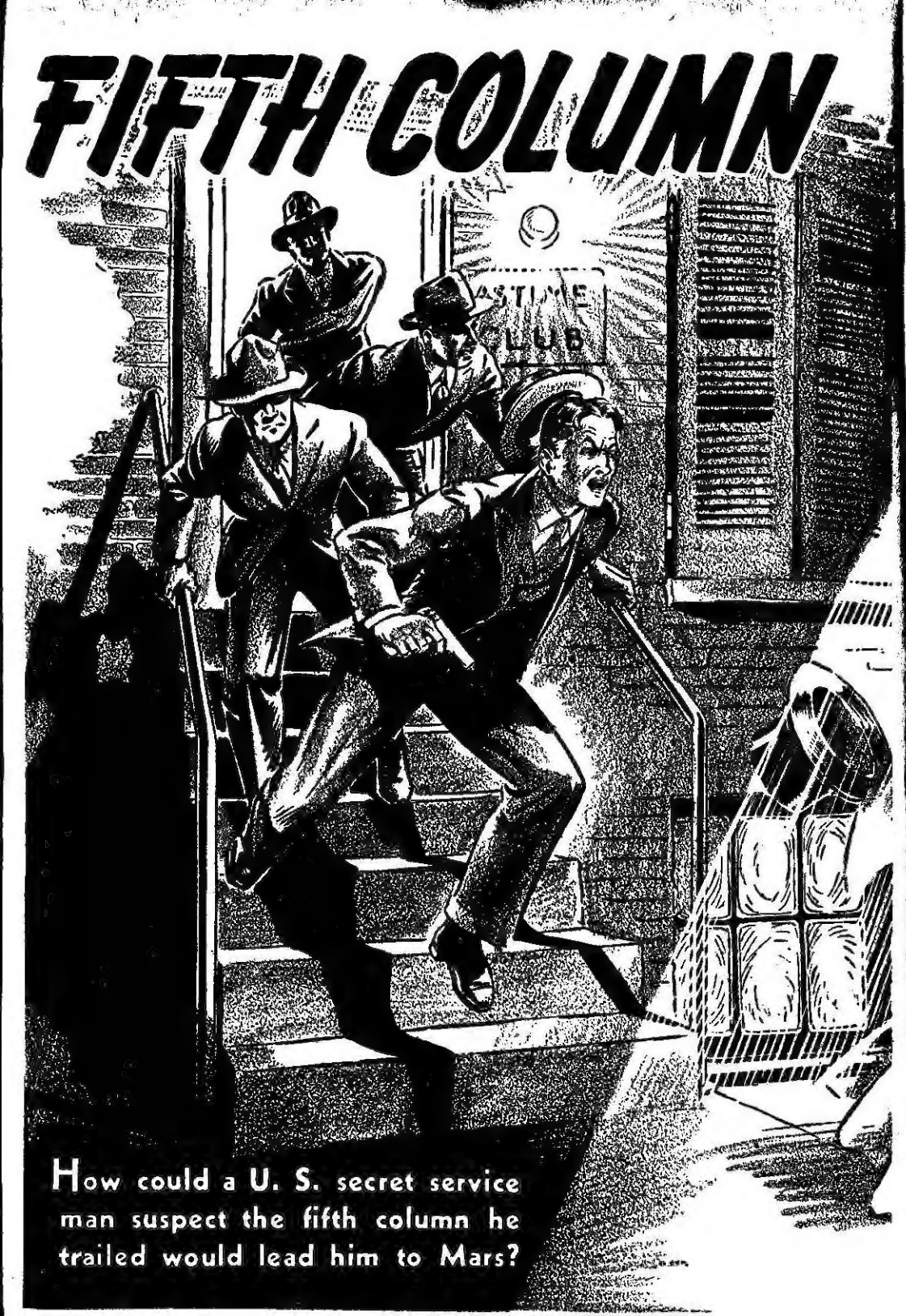
"IT'S a trap!" groaned John Keenan. "And like a damned fool, I walked right into it."

Seated with Betty Phillips at a small table near the wall of the crowded night club, the youthful F.B.I. agent had just caught a glimpse of William Carson, suspected of being the leader of a secret fifth column in America.

Carson was tall and lean. Bushy eyebrows frowned down upon a pair of fierce black eyes. Judging from outward appearances, he might have been an artist, which was exactly what the Federal Bureau of Investigation suspected him of being—an artist in the difficult profession of espionage, sabotage and propaganda, a "borer from within."

Carson had just entered the night club. Two men were with him. Like their leader, they were faultlessly dressed, but even their perfectly tailored suits did not quite conceal the slight bulge under their left shoulders—a bulge that to the trained eye of John Keenan meant a gun in a shoulder holster.

FIFTH COLUMN OF MARS



How could a U. S. secret service man suspect the fifth column he trailed would lead him to Mars?

BY ROBERT MOORE WILLIAMS

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Keenan didn't have a gun. If he had carried a pistol, which his F.B.I. badge entitled him to do, Betty Phillips would certainly have detected it.

"What did you say, John?" Betty Phillips asked, leaning slightly toward Keenan. "The orchestra was playing and there was so much noise, I didn't understand you."

The exclamation had leaped involuntarily from Keenan's lips when he saw Carson enter. It was a slip, and in the grim game of counter-espionage in which he was involved, one slip was usually all an agent was allowed. But this slip did not matter; because, if his swiftly forming suspicions were correct, the fatal error had already been made and the payoff was coming—in the form of slugs of hot lead.

Keenan's gaze instantly came back to his companion. His eyes drilled into the beautiful girl seated across the table from him, and the expression on his lean face hardened.

Had she really understood what he said, he wondered. When he saw the enemy agent enter—a man whom he knew his fellow F.B.I. operatives were trailing—his mind leaped instantly to the conclusion that if this was a trap, Betty Phillips had served as the bait!

She had suggested Keenan meet her at this night club!

That fact alone would have meant nothing under ordinary circumstances. But when there was added to it the fact that Betty Phillips was also suspected of being a member of the fifth column operating in America, and that John Keenan had been assigned to make a thorough investigation of her activities, her suggestion that they come to this club tonight suddenly assumed a hideous meaning.

Had she put him on the spot? Was she working with Carson, as the F.B.I. suspected? Had she somehow discovered that Keenan was a federal man trailing her, and so had arranged with Carson to knock him off as he left the night club?

FOR two months Keenan had been following her. He had kept his identity secret. A meeting between them had been arranged, and he had asked her if he might call. She had assented. They had gone to gay parties together, had made the rounds of the night clubs. Outwardly Betty Phillips was a charming, intelligent, beautiful girl, American to the core, and at times Keenan had cursed the rôle he was forced to assume.

At other times, he knew Betty Phillips was not what she seemed, that he was entirely justified in deceiving her. Something shadowy and dark moved in the background of her life. She was supposed to be employed as a buyer for a California fashion firm. Checking, the F.B.I. had discovered that she actually *was* a buyer.

But she was something else as well. She made mysterious telephone calls. Occasionally she was absent from her apartment for several days, laughingly explaining her absence as trips to the home of an aunt in New England. She received coded telegrams from an unknown source, and while the F.B.I. had secured copies of the wires, it had never been able to crack the code.

All this passed through Keenan's mind in the flash of an instant. The grim thought remained — had Betty Phillips lured him to his death?

"I didn't understand what you said," she repeated. "What is it that's a trap?"

"I said this place is a fire trap," he quickly answered, gesturing toward the silk draperies covering the walls and ceiling. "The city authorities ought not to permit it to operate. Come on. Let's get out of here."

Keenan rose to his feet. Out of the corner of his eye, he saw Carson and his two companions. The enemy agent was moving calmly toward a reserved table.

"Leave so soon?" the girl protested. "We just came. And I'm sure there isn't any danger of fire."

She didn't want him to leave! She was trying to hold him there!

"We're leaving anyhow," he grated. "We'll go to some other club. I have conceived a dislike for this place."

A sharp glance of suspicion shot from her eyes. It was instantly veiled.

"Just as you say, John," Betty answered, picking up her purse.

Before they had taken two steps from the table, she discovered she had forgotten her lipstick and went back to get it. Keenan stepped behind one of the ornamental pillars. He suspected she had deliberately left the lipstick behind, to delay his departure until Carson had had time to spot him. But she did not even glance toward the enemy agent.

Their departure from the club was as casual as Keenan could make it, but beads of perspiration stood out on the F.B.I. man's forehead. Better than anyone else, he knew the danger that was confronting him. It was not a menace that he could meet man to man. It was a menace that struck from behind, that freely utilized the planted bomb and the stab in the back . . .

They paused only long enough for Keenan to retrieve his cane from the check room. He felt better the second that length of polished wood was in his hands. He didn't have a gun, but at a twist of the handle, a length of finely tempered steel would spring from the end of the cane, making it into a very effective sword.

AS they left the check room, Betty glanced backward. Keenan saw the act. He turned casually, and what he saw tightened an iron band around his heart.

Carson and his two men were coming toward the check room. They had not gone to their reserved table. Instead they were coming toward him. They saw him. Undoubtedly they had seen him unobtrusively try to slip away.

At the hiss of his indrawn breath, Betty inquired,

"What is it, John? Is something wrong? What's the matter?"

There was anxious solicitude in her voice.

"Yes," he answered grimly. "Something is definitely wrong."

"What is it?" she asked breathlessly. "Can I help you? Are you ill?"

Even in that moment, Keenan had to admire her ability as an actress. She had put him on the spot—*now she was inquiring if he was ill!* And the expression on her face, the tone of her voice, indicated nothing more than sweet concern for his welfare!

He laughed bitterly. "As if you didn't know what was wrong!" he snarled. "Come on; get that sweet-sixteen-and-never-been-kissed look out of your eyes. You know what this is all about as well as I do! I'm getting out of here. And you're coming with me."

He seized her by the arm. While they had been talking, his eyes had been darting over the room. To go out the main exit might easily be fatal. Carson and his two gorillas would be expecting that. They would follow him out.

But there was a side entrance, a small door down a flight of stairs to the right. The door was open. Through it he could see a quiet side street. He started toward it.

Keenan was l o o k i n g backward, watching for the appearance of the enemy agents. He did not see the intense column of light suddenly appear

on the sidewalk just outside the door, until Betty's sharp cry jerked his head around.

"John! Look! That light. It wasn't there a moment ago."

He merely glanced at it. It was a column of intense white light, misty and strangely solid in appearance, and between three and four feet in diameter. It rose up into the air. How far it went, Keenan did not know. The top of the doorway shut off the sight of the top of it.

"John, I'm scared!" Betty suddenly wailed. "That light is dangerous. I feel it is. And it popped up there so quickly. If we must leave, let's go out the front exit, not this side door. I don't want to go out this way."

She jerked her elbow away from his arm.

A footfall sounded at the top of the flight of stairs. It was Carson. The alien agent stood there looking down at them, a supercilious but slightly puzzled smile on his face. His two men appeared beside him. They started down the steps.

"Maybe you don't want to go out of here, sister," said Keenan roughly. "But you're going anyhow—as a shield! I hate to hide behind a woman's skirts, but in this case, I'm more than justified in doing it. More lives than mine are at stake now."

HE seized her in both arms, and leaped through the door—straight into the column of light.

Keenan's thought, when he first saw the blaze of illumination, had been that it was an advertising stunt of some kind. Perhaps the management of the night club had buried electrodes in the sidewalk, thus producing this effect. Keenan was not an electrician, and at that moment, he was not interested in how the thing worked.

The instant he touched the light, he knew it was not an advertising stunt. As he stepped into it, he glanced upward. In other circumstances what he saw would have left him gasping in amazement.

Like the beam of a gigantic searchlight, the column of light stretched into the sky. Up, up, up, it went, farther than the beam of any searchlight ever constructed on earth, farther than any searchlight ever conceived by the imaginative mind of man. It reached upward—he got the fleeting, startled impression—for millions of miles, to the very stars sparkling in the sky overhead.

A searchlight from the stars! Or was it a searchlight? Was it something else? Could it be some new invention contrived by Carson's associates? Had Keenan been tricked into leaving the night club? Had Carson realized he would take the side exit and contrived some totally unknown, subtle trap for him?

Keenan, with Betty Phillips tightly gripped in his arms, felt the light suddenly close around him. The impression he got, from the nerve impulses tumbling over each other as they tried to reach his mind, was that the light had suddenly become very *solid*. From a tenuous mist, it had seemed to coalesce into a firm substance. And that substance—*gripped him!*

It flowed around his body like water surrounding a drowning man. And if by some miracle the water surrounding a drowning swimmer could suddenly be turned to ice, choking off the death agonies and seizing the swimmer in a grip of steel, the result would have been similar to the effect of this light on John Keenan and the girl in his arms.

The light flowed around him. It seemed to freeze solid. It grabbed him, held him. He tried to struggle against it, but all the strength in his wiry body

was not sufficient even to make the faintest impression on the force that held him. He tried to cry out, and the muscles in his throat ached with the pain of the words he wanted to utter, but couldn't.

For a flashing moment, the light held him. In that moment, John Keenan caught a glimpse of Carson. The enemy agent had come to the exit. He was staring at the couple caught in the embrace of the light on the sidewalk. But whether there was surprise, or satisfaction over a coup well executed, or baffled bewilderment on the face of the alien saboteur, Keenan could not decide. He didn't have time to make a decision. The light swept him up. It whisked him, in some incredible manner, *away!*

It lifted him. He seemed to rise in the air. For a mad moment, he saw New York lying below him. Then there was an arc of blackness under his feet. His tortured mind sought refuge in unconsciousness.

CHAPTER II

The Fisherman of Mars

WHETHER he was unconscious seconds, minutes or hours, Keenan did not know. His mind was a merciful blank. When the blackness faded from his brain, he felt the misty light loose its grip on him. The frozen-solid-in-ice feeling went away.

A rigid paralysis still held him motionless. But it was not a paralysis resulting from the application of an external force. It came from his own mind. Sensations came again to his brain. He could see and feel. The husky rasp of his breath was loud in his ears. But his mind could not accept the impressions brought to it by his senses. His brain called his vision a liar.

He was in what seemed to be a glass cylinder, which was raised several feet above the floor of the strange circular room. Overhead, in a sloping dome that much resembled an observatory housing a telescope, was a round opening over which a screen was closing. As the screen closed, he caught a single glimpse of the sky outside, with stars blazing brightly in the dark vault of heaven.

The room was large. And it was filled with electrical equipment: switchboards, rows of meters. Filling one side completely was a row of huge tanks that looked like a gigantic storage battery.

But it was not the room, nor the equipment in the room, that took the G-man's breath away. It was the grotesque, incredible, impossible monstrosity seated before the banks of switches that made Keenan's senses reel.

The creature looked a little like a man. There was one horrible exception —he had a fanged mouth!

The fangs were like tiger teeth, curved, round and yellow. The face was malevolent, evil. The fangs made it even more sinister.

The creature was almost dancing with glee. He looked at the two captives in the hollow glass cylinder and his face contorted in a grimace of delight. As he came across the room toward them he was positively capering with joy.

"Good Lord!" John Keenan gasped. "Who—what is that?"

He was talking to himself. In the stress of circumstances, he had forgotten the girl, he had forgotten Carson, even the death trap that had been closing in around him. He had escaped the trap — somehow. That much was obvious. But what had happened to him?

He remembered Betty Phillips when he heard the soft cry of fear come from her. Then he realized she was clinging to him.

"John! John! What happened?

Where are we? What is that thing coming toward us?"

There was mad, shuddery fright on her face. Somehow the sight of her fear lifted a burden from Keenan's mind. If she had known this was going to happen, she would not be afraid. Therefore she had not known. Whatever had happened, had been done without her knowledge. Though he did not doubt that she had put him on the spot in the night club, her plans had miscarried somewhere.

A SPY, a fifth columnist Betty Phillips undoubtedly was, but just at present she was only a badly frightened girl. Instinctively Keenan's arm went protectingly around her. With the other hand he firmly grasped his cane.

"Let us out of here!" he yelled. "What the hell is the meaning of this! Kidnaping is a serious offense, punishable by life imprisonment or death!"

His voice roared back at him from the walls of the cylinder in which they were confined.

The creature capering outside didn't hear them. But he saw Keenan's lips move and must have guessed that they were attempting to talk to him, for he swiftly released a series of catches at the base of the cylinder. A section of the glass slid away.

"He wants us to come out," said Betty nervously.

"Well, we're coming," Keenan growled. "I'll go first."

Three short steps led to the floor. Keenan's flesh recoiled as he stepped downward. The monstrosity capered gleefully. His face split into a broad grin, revealing those horrible fangs. Keenan repressed a shudder.

"What's going on here?" he demanded. "What have you done to us? How did you bring us here? Who are you?"

His tone was commanding. But he was bluffing. A cold wash of perspiration bathed his whole body. But no matter how badly scared he really was, he knew there was nothing to be gained by showing it. A good bluff might save them. On the other hand, cringing might seal their doom.

Displaying fangs, their captor answered. His voice was high and sing-song. It vaguely resembled Chinese. But it was in no language known to Keenan.

"I don't get it," he said. "Speak English."

Their captor looked disappointed. He frowned. But only for an instant. Then he began waving his arms again. He started to walk away, then looked back over his shoulder at them.

"He wants us to follow him," Betty whispered.

"I see he does," Keenan answered. "Well," he sighed, "when the devil beckons, we don't have much choice except to follow. If he wants us to go with him, we might as well do it."

With Betty clinging to him, he followed the grinning monstrosity into the adjoining room. What he saw there puckered his brows in bewilderment.

The place looked a lot like a treasure room, a vault designed to protect jewels and gold. There were no windows. Light was supplied by strangely shaped glowing splotches on the ceiling.

But if this was a treasure vault, it held the strangest treasure ever assembled by an insane mind. There were no stacks of golden bars, no gleaming silver, no caskets that might have contained precious stones.

Instead—there were bricks, pebbles, limbs from trees, bits of broken stone, a badly worn automobile tire that looked like it had come from some city dump, a tea cup with a broken handle, an old bone that looked like it had been

picked up on the desert, a fly swatter that had obviously been thrown away.

JUNK! There was a radiator ornament from an automobile, a broken fountain pen, and a battered alarm clock with half its works hanging out. Rusted metal, dry bones. Refuse that might have been picked up on a garbage heap, pieces of broken metal that might have come from a junk yard.

Junk locked in a treasure vault guarded by a metal door that was inches thick!

If John Keenan had needed anything else to convince him that he was hopelessly mad, the sight of this carefully guarded rubbish was it. Betty was looking at it too. Some of the fear was gone from her face now, but there was still terror in her eyes.

The fanged man darted across the room. He grabbed a low metal bench, thrust it toward them. Bowing, he indicated they were to be seated on it. Very gingerly, they sat down.

"There's something terribly wrong here," Betty whispered. "I don't like it."

"I don't like it any better than you do," Keenan answered. "What's he doing now?"

Their captor had darted from the room. He returned in only a second, carrying three metal bands. He placed one of the bands around his own head, adjusting it until it was a snug fit. Then he handed the other two toward them. Betty drew back.

"He wants us to put those bands around our heads, as he has done," Keenan said.

"But—"

"I don't think he means to harm us. If he does, there is not much we can do about it. We're in his power. And I have a hunch that those bands are somehow designed to enable him to communicate with us."

"But that's—that's impossible!"

"I know it is. But from the signs he is making, that must be what he means."

There was a cold feeling running up and down Keenan's spine as he accepted the metal band.* It was about half an inch thick; and through a small slit in the outer side, he saw it was filled with delicate, tiny instruments. The cold feeling grew in intensity. Keenan slipped the band around his head.

A thought impression came hurtling into his mind. No words came; words would have been meaningless. But a thought came! That fact alone was enough to lift him to his feet.

But the fact that the band enabled the wearer to utilize controlled telepathy was not a tenth as stunning as the thought that came through. It was—

"Welcome—to Mars!"

Mars! The red planet in the nighttime sky. Earth's twin sister, the fourth planet out from the sun. Mars!

"What kind of damned nonsense is this!" Keenan stormed. "What kind of a game are you trying to work?" The

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* Richard O. Lewis, in "The Incredible Theory of Dr. Penwing"—AMAZING STORIES for August, 1940—advanced the proposition of telepathic interchange of messages through means of a close-fitting skull helmet. Undoubtedly these helmets—or, as in this story, metal bands—filter out extraneous electrical waves, permitting brain-waves to emanate and be mentally recorded without "static".

The theory of brain-waves is still in the experimental stage, but through a combination of psychology and medicine this whole new scientific vista is being opened for the world. Many scientists have long believed that the physical processes of thought are electrical, the brain being a sort of miniature dynamo which, in addition to regulating bodily functions through the nerves—"wires"—can project its thoughts much as radio waves.

The human brain, as such, is only at the beginning of its powers. New functions are being discovered constantly. In time to come, it may be that people with especially brilliant minds will converse with each other telepathically, to give their vocal cords a rest.—Ed.

exertion of shouting somehow left him short of breath.

"No game," the answer came. "No nonsense. You are on Mars."

"But that's ridiculous!" Keenan blazed, although a horrible doubt was clutching at his heart. "Who—who are you?"

"I am Thordon," the fang-mouthed gargoyle answered, grinning. "Thordon of Mars."

"CUT out the comedy!" Keenan snarled. "This isn't Mars. It can't be! You're working with Carson. They must have used a gas on us as we left the night club, a gas that made us instantly unconscious. Then they brought us here. I don't know what kind of a game you're playing with them, but whatever it is, it won't work!"

The cane Keenan was holding was slick with the sweat pouring from his palms. Noting his angry tension, the creature who called himself Thordon left off his grinning. He beckoned to them.

"Come," the whisper of his thought vibrated. "I will show you. Then you will have no choice but to believe."

Keenan felt Betty trembling as they walked out of that incredible treasure vault, up a flight of stairs, and out on a flat roof under the flaming stars.

He heard Betty gasp as she looked upward, and he knew what had caused that hiss of indrawn breath. The stars *flamed!* They didn't twinkle, as they did when seen through the thick air blanket of Earth. They *flamed!* They were bright dots of white brilliance shining in the black sky. And over to one side—

Thordon pointed. "There!" Triumph was in the whisper of his thought. "There is your planet, Earthman. There is Earth."

He was pointing toward a bright green star burning in the sky.

"And if the sight of the sky is not enough," Thordon continued, "look around you. Is there a city such as this anywhere on your planet?"

Around them, stretching away for mile after mile, was a flat-roofed city. The buildings were not tall—four stories at the most, but the architecture was not similar to anything ever seen on Earth. Only an alien race, totally different in thought and habit, with different methods of transportation, a different culture, a different civilization, could have built this city.

The appalling truth was forced home to him. He *was* on Mars! Thordon was not lying. He was telling the simple truth. Thordon was a Martian!

"But how — why — " The words whispered on his lips and the thought issued from his mind. Thordon's telepathic reply was:

"How? We know much of the science of light. We have learned to project it a distance probably inconceivable to you: to create, at the focus of our projection, a force similar to a magnetic field that will grip any object it touches.

"Unlike the ordinary magnetic field, which will attach itself only to metals, this force-projection will grasp anything it touches, both metallic and organic. Thus it attaches itself to you."

In that explanation, whispering insistently into his mind, Keenan caught a bewildering glimpse of a vast science that was developed far beyond the science of Earth. And in Thordon's next sentence, he found the meaning of that junk so carefully guarded in the treasure vault below.

"I HAVE tried before to bring back one of the inhabitants of your planet," the Martian explained. "Until

now I was not successful. I was able to collect many strange and beautiful objects, and although I wanted an Earthman very badly, I could not catch one. In spite of the near perfection of our telescopes, at the distance your planet is from us, accurate focusing is almost impossible."

In a sense, then, the Martian had been engaged in a gigantic fishing project. Across the depths of space, he had cast his "net" on Earth. And the net had brought back to him—junk from rubbish heaps, broken pottery, an old automobile tire! On Earth, those things had no value whatsoever, but on Mars their scientific interest alone would make them priceless.

Keenan realized what had happened. He and Betty had fled from the night club, and had stumbled right into the telescopic net cast by the fisherman of Mars. It was a weight off his mind to know that at least he had escaped the fifth columnists. Events back on Earth were no longer of any importance.

But there was a growing fear in Keenan's mind—fear of the vast distance he had crossed; fear of this cold, thin-air planet; fear of this strange civilization; fear of Thordon. He did not show the qualms he felt. The bravest man that ever lived may be utterly fearful, but he is not a coward until his fear masters him.

And John Keenan was afraid. What strange motive had sent this fang-mouthed Martian scientist casting his net of light across the reaches of space? The advance of science might explain his action. But looking at him, Keenan could see the evil on his face, the lust for something in his eyes. Thordon was grinning, but his grin was that of a cat which has just caught two very fat mice. Thordon's fangs were gleaming.

Keenan took a determined grip on his nerves.

"What do you want from us?" he demanded.

The Martian looked startled. He glanced quickly over his shoulder, as though the question made him suspect someone might be listening.

"Someone might overhear us here," he answered. "These thought-transmission bands have a limited range, it is true, but someone might hear what we are saying if we talked here. My laboratory is shielded. We will go back there and I will tell you what it is I want and must have from you."

Betty had not said a word. She said nothing as they followed the Martian back down the narrow stairs, but she clung to Keenan's arm with a fierce grip.

What did Thordon want, the youthful federal agent wondered. What secret was great enough to keep the Martian patiently fishing across the depths of space until he had captured a man? What had the human race discovered that the Martian scientist wanted?

Thordon searched the laboratory as though he suspected an intruder might be hidden there. He locked all the doors. Then he drew his two captives to the center of the room, and looking nervously around him, whispered softly,

"What I want, Earthman, is the secret of atomic power!"

CHAPTER III

Thordon's Quest

"THE secret of atomic power!" Keenan's first thought was that he had not understood correctly. The impulses from the Martian's mind had not been too clear at best. And now that Thordon was visibly excited, they were even less clear.

So Keenan assumed he had misinterpreted the thought impulse. He could

not conceive that the vast science the Martian had at his disposal lacked atomic power. Thordon could do things with light that had not even been thought of on Earth. That fact alone meant that his knowledge of science was tremendously advanced.

Also, to project a light trap to Earth would almost certainly require a vast source of power.

"You understood me correctly, Earthman," the Martian impatiently interrupted. He was no longer grinning. "You have atomic power on Earth. I know you do because I have seen it in operation through my telescopes. You came from Earth and must therefore know how this vast energy is released."

"But don't you have it already!" Keenan gasped. "Surely, if you can do what you have done, you must be able to release the power locked within the atom."

"We do not have it," the Martian contradicted. "I am the greatest scientist on Mars and it has eluded even me."

"But what do you use for energy?" Keenan blurted out.

"This." The Martian pointed to the bulky tanks that filled one side of the laboratory. "We draw our electrical energy from a chemical source. And as a result, our power supply is always exceedingly bulky, unwieldy. It does not supply enough energy to move itself. That is why I want the secret of atomic power from you."

Looking at the tanks, Keenan saw how huge they were. If the Martians had to depend on such sources for electricity, they would never have developed even an electric automobile. Nor would they have a vast industrial system powered by electricity. But—neither had the scientists of Earth succeeded in tapping the power known to be locked within the atom.

"But we don't have atomic power!" Keenan protested.

His mind flashed back to the dozens of newspaper stories he had read during the past year, stories of research on Uranium 235. The scientists of Earth were close to the secret. They would solve it in a few more years. But they hadn't solved it — yet. He explained this to the Martian.

Thordon flew into an instant rage. The grin vanished from his face. When it vanished, his face showed nothing but evil. In a second he became a raging devil.

"You lie, Earthman!" he shrieked. "You are trying to deceive me. Let me warn you now that attempting to deceive Thordon will have serious consequences—for you!"

Keenan stiffened. "But I'm not lying. We're working on it. We haven't solved it."

"Lies, all lies!" the Martian raged. "You have the secret. I *know* you have it!"

"But we *don't* have it!" Betty interposed. "My companion is telling you the truth. What makes you think we're lying?"

"THIS!" the Martian snarled. He darted across the room, snapped a series of switches. An instrument similar to a small motion picture projector went into action. The pictures it revealed must have been taken through an exceedingly powerful telescope, for the scenes it revealed were from Earth.

The first picture—there was no mistaking it in spite of the blurred, distorted focus—was that of an ocean liner. A great ship. She was moving slowly and steadily across the sea. The picture must have been taken prior to the outbreak of the present war in Europe; for once, when the focus for an instant

was perfect, Keenan caught a glimpse of the name of the vessel. The *Queen Mary*.

He had last seen her tied up at the docks along the Hudson River, in New York City. It made him madly homesick to see a picture of the ship here in this forlorn laboratory on the planet Mars.

The next scene showed a battle fleet, the great gray dreadnoughts steaming in a long line. The protecting screen of cruisers was plainly visible, and out far ahead, the destroyer scouting force. It was the United States battle fleet, the flag on the mastheads showed.

The sight of that flag here in this mad laboratory gave John Keenan an inexpressible thrill. He, too, fought for that flag, just as those gallant ships were designed to fight for it. But, if necessity ever arose, those ships would fight openly. He, John Keenan, fought the secret, insidious forces working inside the country, the deadly fifth columnists.

The pictures had apparently been taken during battle maneuvers in the Pacific.

Other scenes followed. A part of the British Home Fleet flashed across the screen. Then the pictures turned to something else, and Keenan, watching the Martian out of the corner of his eyes, saw Thordon's tongue reach out and lick his lips.

The pictures showed a battle scene. Great lumbering tanks, seventy-ton steel monsters, smashed ponderously into and over a line of fortifications. Lighter tanks followed. The gigantic armored car movement spread out like a fan behind the punctured lines, attacking the trapped defenders from the rear.

It was the German break-through at Sedan, France, the beginning of the gigantic pincers movement that culminated in the battle of France. It was one of the world's greatest military offensives, as seen through the telescopes of Mars.

Flashing above the tanks, like gigantic dragon-flies, were planes. Hundreds, thousands of planes. The deadly dive bombers shrieking toward the ground. Pursuit ships. Dog fights in the sky. Planes crashing to earth, trailing long plumes of flame and smoke. Craters miraculously appearing where the demolition bombs struck. Battles, the battle for Paris, the battles on the Western Front in this titanic, catastrophic Second World War.

And the Martian was avidly drinking in the scene. His fangs were gleaming, and thin streams of saliva trickled from the corners of his mouth!

ABRUPTLY the pictures ended.

"See!" the Martian screamed. "You *do* have atomic power! Those great ships on your seas, those great, crawling metal houses, those ships that fly through the sky—they must be powered by atomic energy. No other source of energy is great enough to enable them to move as they do. They are run by atomic power. And you are going to tell me how these atomic forces are liberated!"

Keenan stared at him in stupefied amazement. The Martian had showed him pictures of tanks, airplanes and battleships, and had claimed they were operated by atomic power. Nonsense! Tanks and airplanes used ordinary internal combustion engines.

But—and the thought came in a stunning flash—what if Mars had not developed an internal combustion engine? What if their only source of power was bulky chemical batteries? What if—but this seemed incredible—they had never developed even the wheel and the axle?

Was it possible for a race to be so

tremendously advanced in some fields —and the telescopes that had made possible those pictures were tremendous advances, as was the light projection— and at the same time have never developed the internal combustion engine?

"Tell me!" the Martian impatiently commanded. "How are atomic power batteries constructed?"

"I've been telling you the truth!" Keenan blazed. "We don't have atomic power. Those tanks, those airplanes are operated by internal combus—"

Keenan stopped abruptly. He recalled how eagerly the Martian had watched the tanks in operation, how he had gloated at the sight of the planes raining bombs on the earth below.

"Why do you want to know this?" he demanded. "If I could give you the information—which I can't—what use would you make of it?"

The Martian's face changed. He became oilily agreeable.

"Yes, yes. You would naturally want to know that. It is a fair question. I will tell you why I need atomic power."

Thordon paused. "Mars is a poor planet," he continued. "The natural resources we once possessed have been largely used up. We are faced with starvation. Our only hope is to secure power, in large quantities. We have little water. The canals are going dry. Our atmosphere is slipping away. Of course, tens of thousands of years will pass before we will be in great danger, but we must begin now if we are ever to save ourselves.

"That is why we require unlimited quantities of power. To synthesize water, to build vast atmosphere plants to renew our air."

The Martian halted his speech. He eyed the two Earthlings to note the effect of his appeal.

"I ask you to help us," he ended. "Mars and Earth are sister planets. One sister is in great distress. If you will help us in our hour of need, I assure you Mars will remember your act with gratitude."

Not a muscle in Keenan's face moved.

"You've practically got me crying," the Earthman said contemptuously. "We've got fellows who make the same kind of fine speeches back on our planet. We call them politicians, and the mess you just showed us over in Europe is one of the results of listening to them. Thordon, I'm afraid you're going to have to come again. I think you're lying."

THE Martian snarled, "You refuse?"

"Show me your dry canals, show me your population threatened with starvation, show me your need," Keenan challenged. "If you're telling the truth, I'll try to tell you how to build an internal combustion engine. If you're lying, I'll see you in hell before I tell anything!"

Keenan was playing with fire, and he knew it. In defying the Martian, he was taking his life in his hands. But somehow the risk was worth it, especially when Betty whispered tensely, "Good for you, John! Don't tell that dirty devil anything. He has something up his sleeve."

But Thordon did not have anything up his sleeve. He had it in his pocket. His face a mask of baffled rage, his hand darted into his clothing. It came out with a small instrument that was largely one huge lens.

"We'll see whether or not you will tell me what I want to know!" the Martian roared. "When this freezes you, you will be only too glad to open your stubborn mouth."

A flare of light leaped from the lens. But Keenan was already in action.

With a thrust of his hand, he shoved Betty Phillips to one side. A twist at the handle of the cane he carried, and the spring-actuated blade hummed as it leaped out and locked itself at the tip of the stick.

Keenan was right-handed. He threw himself to the floor and to the left, ducking under the beam of misty light leaping from the lens that Thordon held. The sharp tip of the sword blade leaped upward under the fierce impetus of his lunge.

An Earthman armed with a sword cane against a Martian armed with a menacing, incredible weapon!

"I don't have as much chance as a snowball in hell," Keenan thought.

Even if, by a lucky thrust, he disposed of the Martian, there were undoubtedly thousands of others in the city outside. He couldn't fight them all. It would be an Earthman and an Earthwoman against the might of Mars. And Keenan did not know how far he could trust the woman.

But he fought anyhow. He had no choice. The jet of blazing light cascading outward might be intended to annihilate him. It might sear through his body like a hot knife cutting through butter.

Thordon had not been expecting the lunge. The weapon he had jerked from his pocket had, in his opinion, made him complete master of the situation. He was disagreeably surprised not only to find that the jet of light struck nothing, but that the sharp point of Keenan's sword cane was driving straight toward his heart!

He jerked quickly to one side. That motion saved his life. The point of the sword drove straight through his shoulder, and the tip stuck out behind his back.

Keenan saw the Martian jerk aside, squalling. Keenan tried to straighten his lunge, but it was too late. He felt a fierce satisfaction as the point drove into the Martian's shoulder.

"Take that, damn you!" he yelled.

He jerked the weapon from the other's flesh, brought it back for another lunge.

FOR the first time, John Keenan felt there was a chance to win this fight. If he won—well, they would still be marooned on Mars. There was nothing that could be done about that. But perhaps he and Betty might have a chance to live out the remainder of their lives on the red planet as strange castaways of fate.

Hate showed on the distorted face of the Martian. Hate and rage. But now there was fear too. The fanged mouth was wide in a savage snarl as Keenan lunged — straight into the second jet of light exploding from the Martian's weapon.

The beam struck with the force of a physical blow. It hit like the smack of a fist. And when it hit, it seemed to freeze. Again the F.B.I. agent experienced that incredible sensation of being suddenly frozen in ice, the same sensation he had felt when the telescopic beam picked him up outside the night club in New York.

His fingers were wrapped around the handle of the sword cane in a grip he could not unlock. Every muscle in his body turned instantly to ice as the light flowed around and through him. He was driving forward. And he could not stop.

A look of fiendish triumph showed on the face of the Martian as he slipped lithely out of the way. Keenan saw the floor coming toward him. He knew he was falling, but there was nothing he could do to prevent it. He was like a tall block of ice that has lost its bal-

ance. And when he hit the floor, he hit it with shuddering force.

Somewhere he seemed to hear a woman screaming. Then he could hear the sound no longer. It was gone. And blackness deeper than the bottomless pit was crashing into his mind. The last thought that came before the blackness overwhelmed him was that he had lost. He had lost! Now the Martian would be free to use torture to extract the desired information from his helpless body.

"I'll never tell him," Keenan gritted. "I'll never tell him."

Then everything went blank.

CHAPTER IV

The Threat to America

HE had no knowledge of the length of time he was unconscious. It might have been hours. It might have been days. Several times he was vaguely aware that people were near him, but who they were he did not know. Once he got the impression that Fifth Columnist William Carson was bending over him, and he knew he was delirious. He vaguely remembered that he was on Mars and that Carson was back in New York, lost across the millions of miles of space.

Twice he felt himself lifted. He had once been in a hospital as a result of a bullet that had just grazed his head, and in his dazed condition he thought he was back in that hospital, with the chief of the F.B.I. bending anxiously over him.

"We'll clean out those fifth columnists, Chief," Keenan muttered in his delirium. "If they think they can attack America from within, they'll find they're barking up the wrong tree."

Then the nightmare swirled away into blackness and another took its place. Keenan's own heart spoke aloud.

"You're beautiful, Betty. And I love you. But I don't know where you stand in this crazy world. There's something shadowy about you, Betty, something sinister. I can't trust you because I suspect you are an enemy. And I'll lock my love within my heart until I know what you are."

He had never spoken like that to Betty Phillips. But the fever in his mind loosened his tongue and the secret came to his lips. Only Betty Phillips wasn't there to hear it.

Eventually the nightmare turned utterly feverish. Keenan looked upward. A hideous fanged monstrosity was bending over him.

Then he realized it was a nightmare no longer. It was reality. He remembered sickeningly what had happened.

Keenan sat up with an abruptness that sent his senses reeling. He found himself on a stone bench in a narrow room that could only be a prison cell. Thordon was there with him. Thordon was there, ready to use torture to extract the secret that he wanted.

"I won't tell you," said Keenan huskily. "Until I know how you will use the information, I'm telling you nothing. For all I know, all you may need is the secret of the internal combustion engine to build space ships to invade Earth. They've got enough trouble back there, without you butting in. I'll tell you nothing!"

Then he realized the Martian was not Thordon. The fangs were not so sharply pointed. The face was different. There was dignity in the features of this Martian. And no evil.

"Who are you?" said Keenan abruptly.

His thought band had been removed. When it was replaced, the Martian said,

"I am Gurnwald, and I am laboratory assistant to Thordon."

"I suppose he sent you to prepare

me for the torture chamber," Keenan gritted. "If you get anything out of me, you'll have to tear it out by the roots."

"No," the Martian answered. "I do not think Thordon will use torture on you. I believe it is no longer necessary."

"No longer necessary!" The implication of the thought amazed Keenan. "Do you think he took what he wanted to know out of my mind while I was unconscious?"

PERHAPS that was what the wily Martian had done, Keenan thought. While the Earthman was in the grip of the paralysis, perhaps Thordon had probed his mind. If that had happened, Keenan was entirely in the power of the Martian.

As long as he'd had a secret that the Martian wanted, he could use it to bargain with. But once the Martian knew that secret, Keenan had lost his advantage over the other.

"No," Gurnwald answered. He hesitated, and was about to say more, but seemed to think better of it. "I can tell you nothing else. And I must go now. Thordon will be wanting me."

He started toward the door.

"Wait a minute!" Keenan exclaimed. "If Thordon didn't get the secret from me while I was unconscious, where did he get it?"

"I cannot tell you," Gurnwald replied.

Suspicion shot through Keenan's mind. There was only one other possible source from which Thordon could have obtained the information.

"Where is Miss Phillips?" he demanded. "What has been done to her?"

"I can't tell you that, either. I must go now. Later, perhaps, I will return." The Martian closed and carefully locked the door behind him as he left the room.

Later he returned with food. Keenan was ravenously hungry. He wondered if the food was poisoned, but decided he was so completely in the power of the Martians that they would not resort to trickery. If they wanted to kill him, they could find an easier way to do it than to poison him. Silently Gurnwald watched him eat, but when Keenan tried casually to question him, the only answer was a shake of the head.

"Tell me about Earth," the Martian said. He listened with intense eagerness to everything Keenan told him.

"Living there must be wonderful," he said, a deep pathos in the whisper of his thought when Keenan had finished. "But something is happening on your Earth that may be very dangerous to Mars."

The thought seemed to slip out unintentionally. The second he realized what he had said, surprised consternation showed on the face of the Martian.

"What are you talking about?" Keenan demanded.

"Nothing, nothing," Gurnwald agitatedly replied. "Forget that I said anything. You did not understand me correctly."

"The devil I didn't! I heard what you said." Keenan glanced shrewdly at the Martian, and added, "You can trust me."

"Can I?" Gurnwald eagerly questioned. "Can I really believe you?"

His pathetic eagerness to trust the Earthman make Keenan realize that in some respects, this Martian had the faith of a child. He wondered if all the race were like Gurnwald, strange, frightened children huddled on a dying planet.

"I meant every word I said," Keenan answered.

The Martian darted to the door of the room and looked out. Then he closed the door carefully and came back

to Keenan. He made an adjustment of the thought transmitter that he wore, apparently reducing it to its lowest power, and drew as close to Keenan as he could.

"I will tell you," the faint whisper came, "why Thordon sought the secret of atomic power."

"He told me it was to save Mars from starvation," Keenan interrupted.

"HE lied!" the Martian fiercely answered. "It is true that Mars is and always has been starving, but he does not seek to save our planet. Looking through his telescopes, he saw your tanks and bombing planes. That is what he wants—tanks, planes!

"When he has learned how they operate, he plans to construct large fleets of them. Such things have never been used on Mars. He will construct them secretly, and by loosing them all at once, subjugate the whole planet to his will."

"The devil!" Keenan gasped. He saw the whole picture then.

Thordon was the leader of what was in effect the fifth column of Mars. Just as Carson the saboteur, boring from within, tried to cripple and hamper America, preparing the way for eventual subjugation of the United States, so Thordon sought to seize control of Mars.

Back in America, Keenan had been fighting fifth columnists. The same kind of grim, deadly battle was in progress even millions of miles away on Mars.

"You don't want Thordon to do this?" said Keenan.

"I would give my life to overcome Thordon," the Martian answered fervently. "There are many others with me. But what can we do? He has vast power—"

"But he doesn't have tanks and planes — yet," Keenan interrupted. "And he'll never learn how to construct them—not from me."

"That is good, my friend," Gurnwald said. "But—"

A step sounded in the corridor outside. Gurnwald heard it. He leaped away from the Earthman, his face assuming a forbidding scowl.

The door opened. Thordon entered. Keenan merely glanced at the Martian. It was the person following Thordon who held his gaze riveted. He gasped in startled dismay.

Following the Martian was—William Carson! Carson, leader of the fifth columnists in America, deadly master of intrigue and sabotage. Keenan had thought the enemy agent was still on Earth. But he most certainly was not on Earth. He was on Mars. He was here. Here!

"You seemed slightly bewildered to see me," Carson suavely observed.

"How—how did you get here?" was all Keenan could answer him.

"To be frank, when you disappeared so mysteriously, I was no end intrigued. I thought perhaps you Yankees had discovered some method of producing invisibility. If that was true, I wanted to know how you did it. I waited outside the night club to see what would happen. Along toward morning, the light appeared again. I started to investigate it. The next thing I knew, I found myself here. I might as well add that I was greatly astonished."

So that was the explanation! After Thordon had overcome Keenan, he had gone fishing again. His light projector was still focused just outside the night club. He had caught Carson the second time.

Keenan glanced sympathetically toward Gurnwald. The face of the Martian showed nothing, but Keenan knew that his hope of saving Mars was

slim indeed now that Carson had appeared. Carson and Thordon were birds of a feather. They would act together with cruel precision. Carson would readily tell Thordon all the latter wanted to know. The result would be too bad for Mars.

There was only one good feature connected with Carson's appearance. The saboteur was no longer in the United States. He was no longer spreading propaganda in America, sabotaging industrial production, planting bombs, sowing the seeds of discord.

THAT much was pure gain. What Mars lost, America gained.

"What do you want with me?" Keenan demanded. "Or is this just a friendly visit?"

"Well, for a long time we thought you weren't going to recover, and I just dropped in to see how you are making out," the enemy agent answered. "However, now that you have come out of it, I have a proposition to make."

"The answer is 'no' before you start."

Carson shrugged. "Don't be a sap," he said. "Whether you like it or not, we're going to take over this planet. You can't stop us, so why don't you be sensible and throw in with us? I don't mind admitting that we could use a man with your ability."

Keenan made an insulting gesture with his thumb and nose.

Carson colored. "If you want to be a fool, I can't help it. But I'm warning you right now that unless you come in with us, we'll have you liquidated. Think *that* one over!" he flung back over his shoulder as he and Thordon turned and left the room as the door slammed behind them.

"We've got to do something," Keenan hissed to Gurnwald. "And we've got to do it right away!"

"Plans have been made," the Martian answered tensely. "We are to strike tonight. We will attempt to overcome Thordon and Carson before they know what is happening. They stay all the time within the laboratory that protects the light projector. This laboratory is guarded by dozens of automatic weapons. However, we have a means to secure entry. Our only hope is to surprise them. Are you," he looked closely at the Earthman, "are you willing to help us?"

"That's one question you don't need to ask," Keenan gritted. "You're damned right I'm willing to help you save Mars!"

"More is involved than Mars," Gurnwald answered. "Much more."

"What do you mean by that?"

"This," the Martian replied. "I didn't get a chance to tell you before they entered. You have been unconscious for many days and so you do not know all that has happened."

The cold chill of a sudden fear shot through Keenan.

"What are you driving at, man?" he demanded.

"Simply this. Carson and Thordon made a bargain to help each other," Gurnwald told him. "Carson is to teach Thordon how to build tanks and planes. In return, Thordon is to help him. They have been working on the light projector day and night. They have improved it until it can be accurately focused across space. They have been using it to project bombs to your planet. They have sent many bombs to Earth. I do not know exactly where they have been dropping them, but I have many times heard Carson say gloatingly,

" 'You damned Yankees, how do you like *that* bomb in the middle of your arsenal!' "

"Good God!" Keenan gasped. "They're bombing arsenals in the United States! They're sending bombs

from Mars. Why, that damned light projector works both ways. And the boys back home haven't got a chance in a million of finding out what is happening—or stopping it if they do!"

The fifth column of Mars and the fifth column of Earth had joined bloody hands! They were working together, the science of one aiding and supplementing the science of the other. Keenan could easily imagine what was happening in America.

A bomb sliding down a light ray from Mars, landing in the middle of an arsenal in the United States, would explode violently. All the stored munitions in that arsenal would go with it. It would be the Black Tom explosion all over again. And not once but dozens of times! Industrial plants, steel mills, factories, all subject to mysterious explosions. The plants would be heavily guarded, but the destruction would go on just the same.

Within a month the country would be mad with fear. Its splendid industry useless, it could not arm itself against an invading foe. And those bombs could easily be directed at the battle fleet. Battleships, cruisers, destroyers—they wouldn't have a chance to defend themselves. The fleet would be destroyed. An invading army would land on American shores. The United States was doomed!

"Gurnwald, I'm with you to the death!" Keenan pledged himself. He crushed the Martian's hand in a fierce grip.

CHAPTER V

Treachery!

"THERE are guards, also," said Gurnwald nervously. "Slaves of Thordon, they keep watch constantly all over the laboratory. We will strike them down silently. Thordon and Carson are in the room where the light projector is located. We will strike down the guards and be in the room before they know we are attacking."

The Martian held a long, narrow sword in his hand. Pressing close behind him in the dark, narrow corridor were eight of his comrades, similarly armed. Keenan made nine. They had no weapons but their swords. The light-projecting weapon was Thordon's alone.

"Where is Miss Phillips?" Keenan questioned. "If we are detected, and the fight spreads, she might be injured or killed. Could we take her away before the fight starts?"

"To attempt to rescue her may be dangerous," the Martian demurred. "Remember, my friend, the fate of both our worlds hangs in the balance. If she dies, I will be indeed sorry but it is better one should do so that millions may have a chance to live."

"I know," said Keenan. "You're right. But—"

"Does she mean so much to you, my friend?" the Martian softly queried.

"Yes," Keenan answered simply. "She means more to me than I can easily explain. I would be much happier, knowing she is safe."

"Then we will make her safe," Gurnwald replied. "She is in a room adjoining the laboratory. There is an entrance from her room to the laboratory. There is a guard outside her door, which opens into this corridor. I will strike down the guard. Then we will go through her room and be upon Carson and Thordon!"

Keenan's heart leaped with fierce exultation as he watched the Martian stride down the corridor. In the fight that was almost sure to follow, Betty at least would be protected.

The guards in the building naturally

had no reason to suspect Gurnwald. Keenan, peeping furtively around a turn in the corridor, saw the Martian approach the guard lounging outside Betty's door. Gurnwald, the sword behind his back, strode forward as casually as if he had no other thought than making a social call.

The guard stiffened to attention. Gurnwald leaped, the long sword flashing upward. The Martian had to kill instantly and silently. A single outcry from the guard would spell their doom. It was no time for false pity. The guard was one of Thordon's men and if given the opportunity, would be as cruel and as heartless as his master.

The surprised man attempted to leap back when he saw the sword coming, his hands dropping toward the dagger at his belt.

Gurnwald's sword caught him straight in the throat. The cry he would have uttered went out a slit windpipe. Blood spouted gruesomely from his throat.

When Keenan arrived on the spot, Gurnwald was wiping blood from his sword. The Martian looked a little sick, but there was an unmistakable grimness about him. He did not even glance at the twitching body on the floor. Instead he produced a key from a pocket and unlocked the door.

"Inside, quickly," the hiss of his thought came. "And tell the girl not to make a sound if she values our lives."

KEENAN went through the door. The Martians crowded closely behind him. A girl was in that room. Betty Phillips. They had reached her. Now, no matter what happened they would have a chance to protect her.

She looked up. Fright showed on her face as they came crowding in.

"Betty!" Keenan whispered. "Betty! I've found you!"

"You!" she answered. "You—"

He choked down the impulse to take her in his arms. There was no time for that.

"Betty," he whispered, "I haven't time to explain everything, but we've got a chance—a ten-to-one shot!—to capture Carson and Thordon, to stop this hellish business before it goes any further."

"You have?" she questioned, in a monotone. Her eyes were fixed and glassy as she stared at him. Her face was chalk white. "You have a chance, John?"

"Yes. If we can charge their laboratory before they know we're coming, we'll win. Do you hear that? We'll win! Both Mars and Earth will have their chance for freedom. But we want you to be safe before we go through into the lab. You must leave this building at once. The guard outside your door won't stop you. He's dead. Don't make a sound as you leave. We'll take care of everything else."

"But—" she protested.

"Carson is an enemy agent," he continued. "He's a spy. I happen to know the F.B.I. was trailing him, back home. He's working hand in glove with Thordon. Betty, whatever you may have been, you've got to realize this. Carson is trying to destroy the United States! And we've got to stop them.

"Like a lot of other people back home, you may have sympathized with various movements in the past, without realizing you were being betrayed. But you must know now how terribly you were misguided. Oh, I don't have time to explain. You've got to believe me!"

Keenan was suddenly sweating. He was torn between two terrible desires. He loved this girl and yet he did not quite trust her. And he had to convince her that he was right. She faced him, and her soul was in her eyes.

"John," she breathed huskily. "Oh, why did you have to be—"

"All you have to do is believe me," he said huskily.

"I do believe you, John."

"Thank heaven for that!"

"I believe you—*this much!*"

She backed away from him. In the still, silent room her sudden scream was a flaming dagger of hurtling sound.

"Carson!" she screamed. "Keenan has escaped! He's trying to trick you!"

In the horrid silence that followed Keenan heard an answer come from the laboratory beyond. He also heard Gurnwald curse, and leap past him. With the back of his hand, the Martian shoved Betty out of the way, kicked open the door, and leaped into the laboratory beyond, his companions following behind him.

Keenan did not, could not move. Betty lay against the wall where Gurnwald had shoved her. She wasn't hurt. Oddly, Keenan noticed that she was crying. Tears at that moment didn't matter to him. The only thing that mattered was that Betty Phillips had betrayed him. He had tried to save her from danger, and she had repaid him with treachery.

"You treacherous she-devil!" he snarled. "You're as bad as Carson, as bad as Thordon! I don't know when it will happen, but I know this much: Fate always arranges a payoff for people like you!"

SHE did not answer. From the laboratory there came the sound of fierce fighting. It roused Keenan to action. There was yet a chance that he might undo the damage this girl had done. Gripping his sword, he leaped through the door.

The glass cylinder of the light projector bulked high in the center of the room. There was a huge bomb in it now, waiting to be sent hurtling out across space to Earth. Above the projector, the dome was open to the sky.*

At the base of the projector was a knot of men—Gurnwald and his comrades. Facing them were Carson and Thordon. Eight against two! But the eight were armed only with swords. Thordon had the same small light projector he had used to paralyze Keenan. Carson had a black-snouted automatic pistol, a gun that he had brought from Earth with him. He was using it. The heavy thunder of its firing roared through the room. Jets of light were leaping from Thordon's weapon.

Gurnwald and his comrades were crowding forward, leaping with supreme bravery directly into the deadly weapons. And they were dying. As he came into the laboratory Keenan saw that three of the Martians were already on the floor. And two more went down. Five gone. That left Gurnwald, and two of his companions.

Gurnwald charged his enemies.

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* It may very well be that Thordon, the would-be Martian dictator, actually utilized a principle of atomic power without knowing the full scope of his invention. Obviously, the tremendously penetrating cone of light he projected to Earth disrupted the atomic structures of the objects focused upon.

Once disintegrated, the atomic mass was "lifted", or absorbed, through space up to Mars, where the atoms reassembled themselves exactly in the object stolen. Similarly, to bomb Earth, the bomb would have to be atomically disrupted at the outset, be propelled down the pillar of light to its objective on Earth, and then instantaneously coalesced at the moment of impact.

Thus the effect would be the same as a projectile fired from a gun, or a bomb dropped from an airplane.

While atomic warfare is still in the realm of the future, the Second World War has demonstrated that war-makers are concentrating nowadays on the mechanical side of conflict. Weapons used today would not have been conceivable a quarter century ago. At least it is known that through scientific experimentation—which involves the study of atomic structures—ordinary shells and aviation bombs are now far more deadly than in the last war.—Ed.

"Forward, Mars!" Keenan felt the pulse of Gurnwald's thinking. "Win or die!"

Whatever else that sad-faced Martian was, he was no coward. He had the courage to face death. Keenan felt a surge of admiration for him. When the going was tough, Gurnwald was a lad to tie to.

Carson's weapon thundered. The heavy slug caught Gurnwald in the chest, violently shocked him backward.

The F.B.I. man cursed. Gurnwald was down. And if Keenan charged directly into the weapons of Carson and Thordon, he, too, would be finished.

There was only one hope: take them from the rear! With leaping heart, Keenan saw there was a chance he might make it. Ducking behind the heavy equipment in the room, he raced clear around the laboratory. He found himself in a cramped alcove, directly behind Thordon and Carson. He was so close he could see the look of victory on their faces.

But—he was so close he could not use his sword. The long, slender blade simply could not be swung in such close quarters.

He was weaponless!

Ahead of him he saw Gurnwald trying desperately to get to his feet. The Martian was down. But he was still fighting. He was trying to get back into the battle, to join his two companions.

Only there weren't two of them any longer. One had stopped a jet of light from Thordon's weapon. Like a frozen block of ice, he was slumping to the floor. There was only one other Martian left now.

John Keenan dropped his sword. His right foot went forward. His left fist started just even with his belt. It leaped outward, with all the weight of his husky body behind it. It struck Thordon just under the ear and at the side of his jaw.

"That's for Gurnwald!" Keenan raged.

Thordon's head doubled over against his shoulder. His arms went up in the air, the light projector swinging outward from his hand. He sagged to the side and down. He was out before he hit the floor.

There's nothing like a pair of fists in close quarters, Keenan exulted.

Thordon was out. But Carson remained. And Carson was the more deadly of the two. More, he knew about fists and about fighting at close quarters.

JOHN KEENAN whirled like an angry tiger, dropping into a crouch as he turned.

The movement saved his life. A savage finger of burning gas leaped at him from the pistol in Carson's hand and a slug tore through the air above him. The roar split his eardrums.

"One miss is all you get!" Keenan shouted.

His left leaped out again. He was smashing forward from a crouching position and he did not attempt to hit Carson on the chin. Instead he aimed at the latter's stomach. Carson saw it coming. He tried to twist aside, to bring the barrel of his gun down over the head of the F.B.I. man. But Keenan's fist drove forward.

The blow would have staggered an ox.

"Oof!" Carson gasped, air whistling from his open mouth. He sagged forward.

And Keenan straightened him up with a right to the jaw, straightened him up so viciously that the saboteur turned a flip-flop before he hit the floor.

For an instant, Keenan did not real-

(Continued on page 125)

CHAMPLIN FIGHTS THE PURPLE GOD

by DON WILCOX

Wayne Champlin knew that he faced terrible danger coming back to his native island, but he had sworn to free his people from the Purple Slavery

WEARING only his swimming trunks, Wayne Champlin waded into deep water and began to swim. Through the lavender mists of evening he could see his destination four miles ahead—a low cone-shaped island. The pinnacle of the cone was aglow with a faint purplish light.

"The Shrine!" he muttered bitterly to himself. "Still burning."

Time was when that rim of purple fire had been the ruling power over his life. But ten years away from his native island had changed all of that.

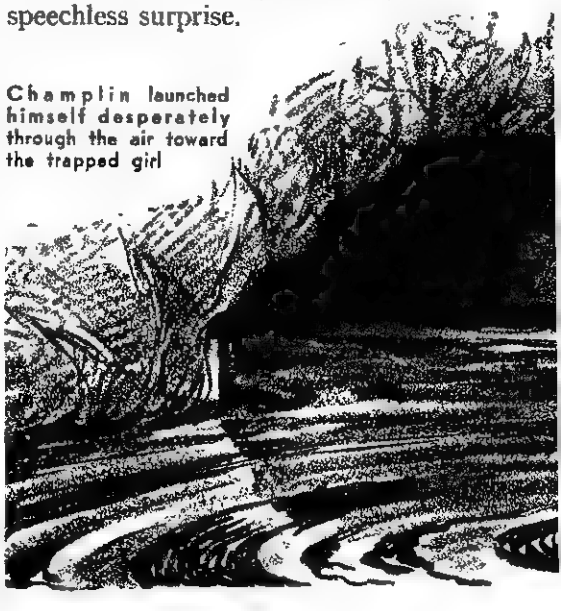
Champlin swam easily. A miniature raft of bamboo stalks slipped along after him, hitched from his shoulders and neck by a lithe cord. On the raft was strapped a battered traveling bag containing his personal effects. His people would be surprised to see him. No doubt they had thought him drowned . . .

A splash of water disturbed his thoughts. He glanced back at his cargo, then stared in frank amazement.

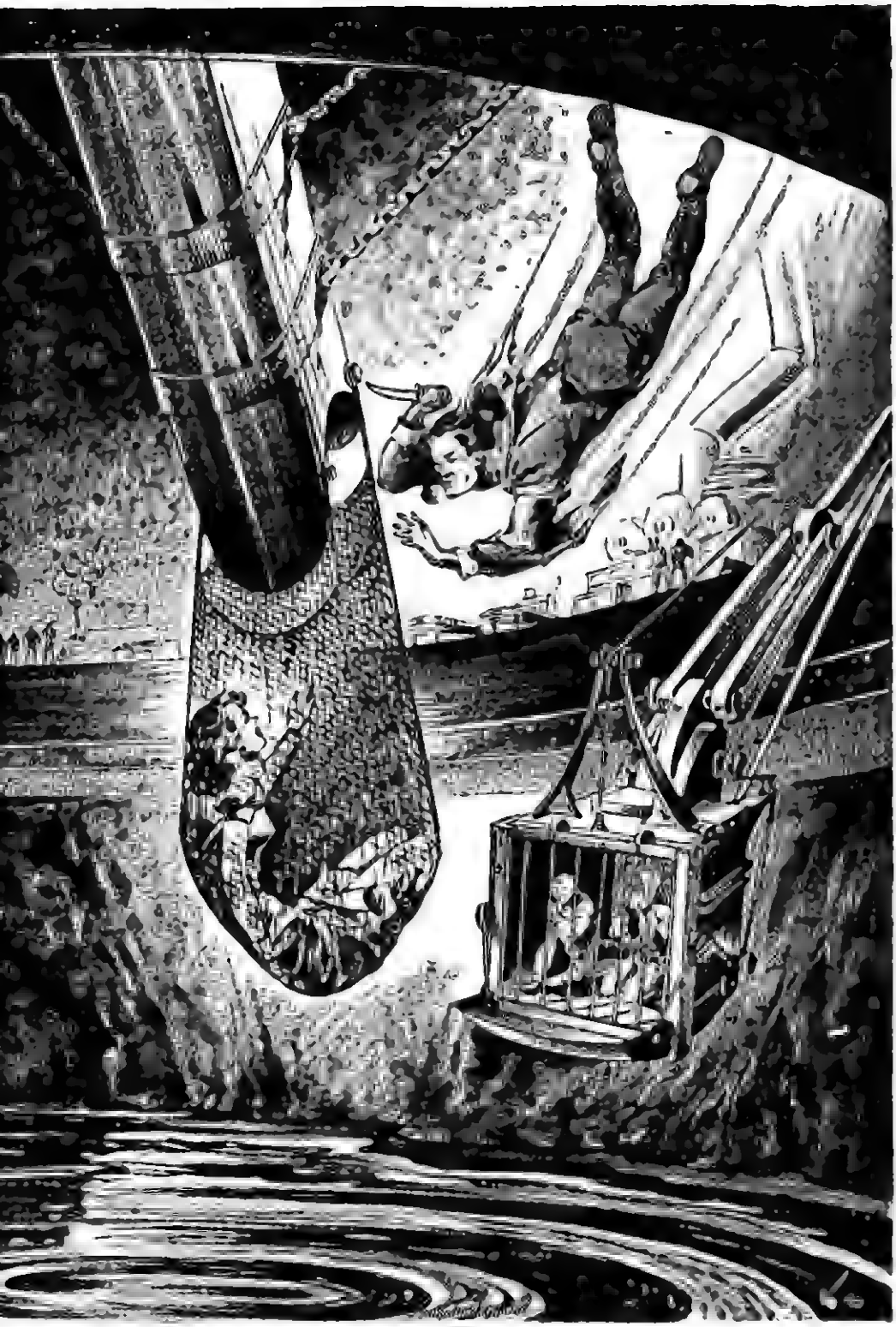
His raft held not one traveling bag but two. And clinging at the end of the towline was a girl.

"Champ!" the girl called breathlessly. "Champ! How much farther are you going?"

Wayne Champlin drew the end of the makeshift raft under his muscular arm as if groping for support. He gazed in speechless surprise.



Champlin launched himself desperately through the air toward the trapped girl



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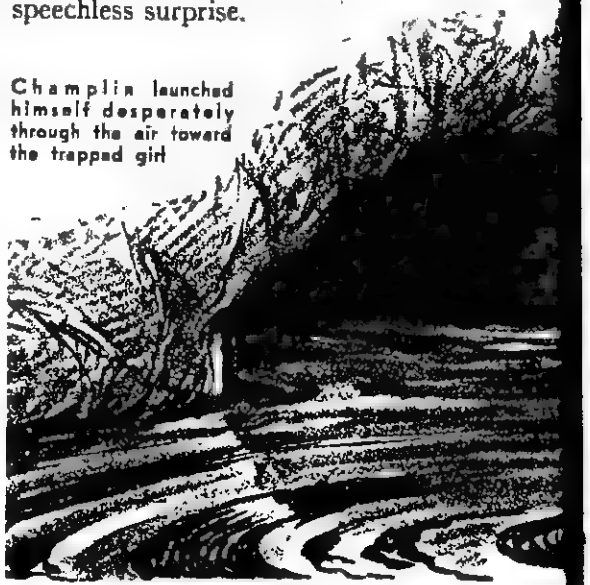

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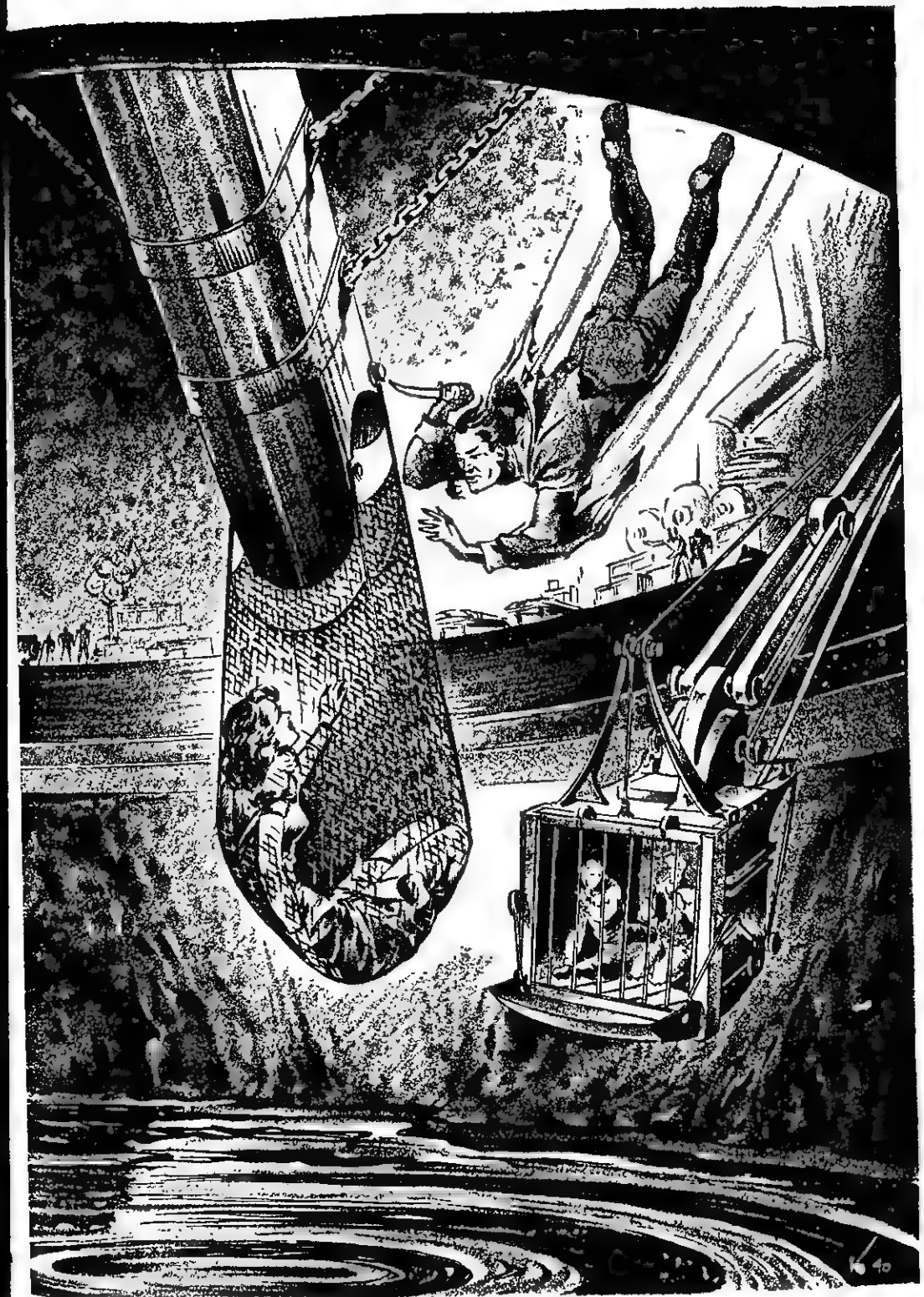


"Champ, don't you know me? It's Elsa!"

Wayne Champlin paled. Here in the final plunge from the real world back to his old world of superstition, must he be haunted by figments of his imagination? This could not be real. The clear gray waters and the lavender mists of evening had conspired to fool him. And yet—

The girl smiled at him expectantly. Water dripped from her smooth white forehead, her long brown eyelashes, her full red lips. The waves washed over her bare shoulders. Her scanty bathing attire of flimsy silk underthings clung closely to her slim shapely body.

"Elsa! What are you doing here?" Wayne Champlin's lips spread in dismay and his white teeth gleamed fiercely. "I told you 'good-by' back in the States—"

"And I told you I'd follow you to the end of the world," the girl breathed tremulously.

So she had kept her word. She had fled the city's slums to follow him, not knowing where the adventure would take her.

"But Elsa, I told you not to—"

"Oh, Wayne!" The girl's eyes filled. "Aren't you the least bit glad to see me?"

Her white fingers locked around his neck appealingly and her face tilted toward his. She searched his eyes.

"I've had such a time following you, Champ. I was on the same boat with you—the captain's wife kept me—but I was afraid to tell you I'd come, for fear you'd send me back. I didn't even know where you would lead me—but I knew there was danger—and I loved you so—"

Wayne Champlin caught the lithe form in his strong brown arms and kissed the lips and eyes and forehead feverishly. For a moment the two swimmers slipped beneath the water's surface in forgetful ecstasy, then bounded up breathlessly and caught the tiny raft for support.

"I'm terribly glad to see you," Champlin assured her in his low rich voice. "Don't ever doubt it . . . But it's like I told you that night I left you, Elsa—"

That vision had been a mystery to Elsa from the first. She had tried to understand. Her quick intuition had told her that Wayne Champlin was something more than the handsome, silent, dreamy lifeguard at the city beach. But though Elsa, a waif from the slums, had found her way into his heart, *his* people remained a mystery.

"If my people are still under the yoke," he had always said, "I've got to help them. My own happiness can wait."

NOW Elsa gazed at the little isle, wondering more than ever what strange magnetism called him back. But he had spoken of a fight that awaited him. She had not followed him to this lost corner of the earth, only to let him throw himself away on some foolish danger.

"I'll go with you," she said firmly. He protested, but she insisted that she could swim that distance alone, and would do it if he chose to shake her loose from his raft.

"You win," Champlin sighed. "Come on, I'll take care of you."

Elsa would be about as safe on the island as a rabbit among hounds. But darkness was falling. She might see his people without being seen—perhaps there would be a ceremony at the Shrine. At any rate, tomorrow he would send her safely on her way back to America before he began his fireworks.

Swiftly they swam through the mild

semi-tropical waters. When they turned to swim on their backs, they gauged their directions from the first bright stars of the night. The little raft containing their worldly possessions glided along after them.

When Wayne Champlin had last swum these waters he had been a boy of twelve. It had been good sport to swim out a mile or two to greet passing steamers. Of all the boys, Champlin had been the best swimmer, and the most daring.

Once he had swum too far. At least the captain of the passing boat thought so; he was afraid to let the boy swim back. The crew took young Champlin in. That was how he was lifted out of his own little world of mystery and superstition and dropped down in the United States.

He had raced through his years of schooling; every new truth he had learned was a bombshell that shattered the superstitious world of his childhood. At last he had burned to go back and unleash these truths that would set his fear-crushed people free. Two summers as a lifeguard, two winters of professional diving and acrobatics, and his savings were equal to the trip.

But now, as the island came closer, Champlin was painfully aware that he did not know all the answers. The tales of occasional ghosts of sacrificed islanders he had simply rejected as falsehoods. But the unsolved mystery of the all-powerful Purple Fury burned like an electric torch in his mind.

"That little spark of purple fire is getting brighter," Elsa observed innocently. "Have you noticed it?"

"The sky's getting darker—and we're getting closer."

"It can't be a volcano—"

No, this was not a volcanic island; only a hill of limestone jutting out of the water. Terraced? Yes, the islanders did that many generations ago. Now each class lived on its own level. Half the population—five or six hundred people—occupied the lowest level, circling all the way around the hill.

THE island was two miles across, but no one ever went straight across; roads and paths circled the cone on their own level, or spiraled to the next levels. The top of the cone-shaped hill was not more than a hundred feet above sea level—really not much altitude.

But that altitude was the most important thing in the world to the rich, powerful *Summiteers,* whose ornate mansions were within a few yards of the top. Their elevation set them a world apart from the poor, mean, miserable *Grubbers* at the foot of the hill.

"I was a Grubber," said Wayne Champlin in a tone that left volumes unsaid. He might have added that his great-great grandfather had been a prosperous sea captain before a shipwreck put him ashore, crippled and broken. "I'm still a Grubber."

Elsa's interest sharpened. Champlin swung the little raft in front of them. Together they planted their forearms and chins on the end of it and kicked along over the darkening waters effortlessly, pushing it ahead of them.

"Perhaps," Elsa facetiously probed, "you've come back to build your own mansion on the very top."

"A splendid idea!" Champlin snorted. "But it happens that top is very much occupied. It belongs to the smoky monster—"

"Monster?"

"The Purple Fury. He lives in that ring of purple fire at the top. He's the invisible ruler. One whisper from him sets the whole nation trembling."

The girl edged closer to Champlin's warm shoulder.

It was nearly pitch black when they

reached the island. They dressed in dry clothes and hid their luggage by starlight, then ascended the rugged cliff to the first—the Grubber—level.

Fields and huts were dimly visible as they slipped along through the blackness. The only signs of life came from near the hilltop. They threaded their way up the terraces cautiously.

Now they could see a host of yellow torchlights. The clearing below the summit was alive with people.

"An assembly at the altar," Champlin whispered. "Listen! They're chanting! It's a sacrifice!"

Elsa heard a bewildering conglomeration of sounds: the low ominous roar of the purple fire on the altar; the hollow, mocking chant; but above all, the angry shouts and wails and mutterings from the lower half of the assembly.

"Listen to them roar!" Champlin exclaimed. "That's my people! The Grubbers! See—" He quickened his pace, leading the girl by the hand. "Look at them shake their fists!"

Elsa saw. The assembly was divided. The line of division was exceedingly sharp. It consisted of a row of spears in the hands of husky men wearing purple and gold uniforms. They were a wall of protection for the upper assembly, the ostentatious chanters.

The lower assembly, more properly a mob, was being held at spear's length. Lacking weapons, the masses were nevertheless protesting as violently as they dared. Now and then a spear struck out, and a cry of pain cut the air.

What it was all about, Elsa could only guess. But as she and Champlin approached, too close for comfort, she caught glimpses of the Grubbers' torchlit faces. Anguished faces they were, taut with pain. But there was something familiar in those countenances, violent as they were.

And that was Wayne Champlin. His strength and his vision was in every face. Something tugged at Elsa's very soul. These were Champ's people!

A MOMENT later the violence reached its peak and the scene became one of unspeakable horror. A wave of Grubbers charged at the line of spears. They charged in arrow formation, and the front man spread his arms, seized several spears, and plunged them in his body. The wall of spears broken, the others poured through—but only for an instant.

A heavy sullen roar came from the altar. The chanting stopped. The charging Grubbers froze. The shouting and wailing gave way to a gasp of terror as wide as the hillside. All eyes were on the altar.

Suddenly there appeared above the circle of fire a huge smoky monster. In size, it might have been an upended locomotive. In form it might have been a gory-mouthed demon patterned on human lines. Its face opened hungrily, its head drew down, its arms reached to grab.

The whole body was enshrouded in purplish black smoke, and before anyone could so much as shrink, the smoke thickened and the sight was lost from view.

"The Purple Fury!" Elsa gasped.

"It's a lie!" Champlin hissed. He held the trembling girl tightly, and whispered staunch angry denials of the thing they had both seen. But his whisper came through his teeth, and his own body involuntarily trembled.

Again the Purple Fury roared, and the people fell back in terror; all except the corps of officials attending the details of the sacrifice. They were busy carrying out the dastardly deed that the smoky monster had commanded. For the monster was hungry.

"There's no stopping them now,"

Champlin whispered bitterly. The mob had tried to break up the ceremony, but the sight of the Purple Fury had paralyzed them with terror. "Here comes the *feeder!*"

Now a long beam began to rise like a derrick arm. It was a thirty-foot beam, a trough in shape, like an elongated bath tub or a deep-walled slippery-slide. The hollowed-out surface gleamed with a high polish.

The end of the feeding chute rose swiftly. A decrepit-looking old man occupied that end. The lower, the pivot end of the chute, hovered over the blazing altar. The man began to slide.

With a piteous outcry like that of a dog in a vivisection surgery, the man shot down. As he flew out the open end, he slapped his bony hands over his eyes. Then he was lost from view forever within the ring of purple flames.

CHAPTER II

The Living Ghost

NOW the upper congregation chanted, with a note of sadistic victory in their hollow voices. The lower assembly raised its defiant cry. Its ranks surged threateningly.

But the prize for which the Grubbers had charged, their comrade's life, was gone now. The wall of spears pressed them back.

Champlin watched them proudly. "They've got plenty of scrap!" he muttered. At least the past ten years hadn't dented their spirit. But Champlin knew only too well how rarely his people ever saved a victim from the sacrifice. Whenever a victory seemed near, the hideous Purple Fury would turn visible. That fearful sight would paralyze their blow.

Now under the pressure of spears, some of the Grubbers knelt and pretended to join the chant; others retreated down the hillside. There were wounded and dying among them, the heroic ones who had charged the spears.

"But *why,*" Elsa asked, "was that man sacrificed? And how can those other people sit there and chant as if nothing had happened? Haven't they any feelings?"

"Not for the Grubbers," Champlin answered. "The chanters are mostly Higher-ups. They live on higher levels than the Grubbers . . ."

There was the key, he explained bitterly, to the island's social system. The highest of the Higher-ups were the Summiteers. Their closeness to the Purple Fury gave them an iron hand over all other levels. Theirs was the privilege of hearing and interpreting the Purple Fury's commands.

"Those handsomely dressed people in the first few rows are Summiteers. If one of them decides a Grubber should be punished for some offense, he will declare that the Purple Fury has *whispered.* When the Purple Fury whispers, it usually means tragedy for the Grubbers. Someone is fed to the flames."

"Then this man who slid into the fire was guilty of some crime?"

"Probably the crime of stealing grain from his own field—*vulcatching,* as we call it."

Suddenly the attention of the multitude was again captured by the feeder. It swung upward. The chanting ceased. The throngs of Grubbers who had started down the hillside turned. Their shocked eyes beheld another sacrifice, obviously a surprise.

The gleaming trough contained a tiny figure—a child! Cries of terror rang from the hillside. The child slid down, screaming, and shot into the flames!

Elsa hid her face in her hands. When she looked again, she saw that the enraged mob had gone berserk. They

hurled rocks and swung torches and clubs; they wailed and cursed and stormed; they surged into a solid group and fought their way back against the wall of spears.

But again the low sullen roar of the Purple Fury thundered forth. And again, for an electrifying instant, the gigantic demon reappeared.

The mob halted. The glowering countenance was obscured in a smoke cloud; but that moment's glimpse had done its work.

The Grubbers fell back. Reluctantly they resumed their retreat down the hillside, under the urging of spears. A few of them hovered over the young mother who had collapsed, and they bore her away tenderly.

For many minutes Wayne Champlin did not trust himself to speak. He breathed hard. His white teeth were set.

The ceremony was over. People of all classes made their way toward their homes.

THOUGH it was after midnight, the officers in purple and gold paraded in full force, marching noisily up and down the roads. They were the *Disps*, or more properly the Disciplinarians, who ranked next to the Summiteers themselves. They were the dashing military force. Their spears and broadswords were the teeth of the island's laws. The Purple Fury's sacred whims, as conceived by the Summiteers, were theirs to enforce.

For two full hours the Disps strode through the dusty roads of the Grubber level, to make sure that the rebellious toilers were quiet for the night. At last they returned to their headquarters, and soon their torchlights were extinguished for the brief remainder of the night.

Elsa and Champlin circled the island on the Grubber level. A few of the shanties were lighted. A few people clustered together at each of the bereaved homes.

Far from being broken in spirit over their losses, their talk sounded as if they were jubilant over their gains. Elsa was amazed at the overtones of enthusiasm. What did it mean?

"It means that they've got the greatest fighting spirit you ever saw," Champlin declared as they approached one of the little houses. "The odds are all against them, but they won't be downed. And they gave the Higher-ups an awful close run for their money tonight."

Elsa shuddered involuntarily. She knew that if it hadn't been for protecting her, Champ would have led that plunge against the spears. Nothing he could have done would have prevented those sacrifices tonight; nevertheless, Wayne Champlin might have recklessly given his life in the effort.

Panic shot through Elsa with these thoughts. Secretly she resolved that she would never leave this island until Champ would go with her.

"I'm sending you back at dawn," he said, as if reading her thoughts. "But first, you'll have a chance to meet some of my people."

He called softly to the group of people who sat near the entrance of the shanty.

"Who is it?" someone demanded.

"Wayne Champlin. I've come back."

Torchlights and incredulous faces gathered around the strange young couple. Wayne Champlin repeated his claim, announced that he had come back to help them fight their fight, explained that he had brought a friend with him. The Grubbers studied him dubiously.

But his story of his departure from the island ten years ago impressed them.

"So you're Champ, are you?" said one of them, a short young man of Champlin's own age. Without warning, the speaker tossed a knife. A torchlight showed it coming.

It was a long-bladed corn knife, aimed for somewhere above Wayne Champlin's head. Champlin reached into the air and caught it by the handle. The next moment he and the short young man were gripped in the hand-shaking of long lost brothers.

Bosom friends were "Shorty Joe" Sanburn and Wayne Champlin, and the knife-catching was a fond stunt of their boyhood days. At once there was an impromptu rally around Champlin and his girl friend. In soft but exultant voices the news quickly spread around the lower level of the island. Young Champlin was back! Young Champlin, grown to manhood!

IT was a sleepless night: the night's tragedies had made it that; but Champlin's homecoming ushered the dawn in with clandestine rejoicing.

"We can't say we've gained a great deal of ground in the past ten years," said Shorty Joe Sanburn, "but we haven't lost any. If we could once get our hands on some weapons, we'd fight our way to the summit."

The mention of the summit called up a fearsome picture in the minds of the Grubbers who had gathered around to join in the talk.

"That damned demon is a fake!" Champlin declared solidly. "I've studied and learned about things, and I know. There *can't* be such a thing!"

There was an uncomfortable silence. Several wistful glances shot toward the graying darkness, in the fear that some Higher-ups might be listening.

"Yes, I saw what you saw tonight," Champlin continued. "I can't explain it, but I still say it's a fake."

Shorty Joe picked up the argument. "But there's where they've got us. One way or another it does consume us, even if it is made of thin air. And none of us knows who'll be next."

"Thin air!" someone mocked. "The old devil's thicker than your head!"

For Champlin's benefit the group rehashed many past incidents. Elsa listened with bated breath. The unspeakable cruelties and oppressions were almost too much for her. That there should be a regular custom of murder practiced upon the first-born of each family, in the name of reverence for the hideous smoky beast, seemed the height of outrage.

Only the lower class families, to be sure, were victims of this child killing. To her horror, Elsa learned that Wayne Champlin himself was a first-born child. Miraculously he had escaped the sacrifice. But his parents, when their crime of hiding him had been discovered, had paid bitterly with their own lives.

"Back of it all," Champlin declared with his new-world insight, "is the food shortage. If these sacrificial murders didn't keep our numbers down, we'd soon outnumber the rest of the population. Then we would demand a larger share of the food we raise, and the Higher-ups would have a revolution on their hands. That's why they murder us in the name of a horrible superstition."

"Then you don't fear the Purple Fury?" someone asked, breaking a tense silence.

"I've come back to blast the Purple Fury to hell!" Champlin shouted.

Shorty Joe leaped to Champlin's side, slapped him on the back, shook his arm.

"Tell them about it, Champ, old boy! Maybe they'll listen to you. They won't to me. I've tried to tell them that the monster is nothing but thin air—"

"What makes you say it's only thin air?" Champlin demanded.

"Because once during a ceremony, I hurled this corn knife through it."

The group mumbled skeptically. One old man complained that the Grubbers possessed too few knives to be throwing any of them away. It was obvious that everyone had heard Shorty Joe's story before, and that no one believed it.

"I've come back for business," said Wayne Champlin, rising and clenching his fists. The group rose with him, and for a second time Elsa saw his indomitable courage reflected in their faces. The very air was charged with the magnetism of decision.

"WE'LL follow you through hell and high water, Champ!" said the old man. Then with a note of caution he added that plans had best be laid on the quiet. Dawn was at hand now, and the ever vigilant Disps would soon be watching from their upper level. Their field glasses were sharp to catch signs of trouble.

"I'll talk over my plans with you people through the day," Champlin advised. They must go to work as usual, and not cross the path of a Disp if they could avoid it. "Before it gets any lighter, I'll take my girl friend over to the mainland to safety. I'll be back with you soon."

The Grubbers departed quietly; inwardly they seethed with enthusiasm. Before breakfast was over, every Grubber on the island would know that a revolution was brewing.

Elsa and Champlin circled to the opposite side of the island, where their raft and luggage were stored. Determined as Elsa was to stay, she saw that she would have to leave. These Grubbers were ready to follow Champ's every order. She must do the same.

But her whole soul was already in this fight—her every thought of Champ, who was her very life—

Suppose she should fall from this low cliff and break an arm or sprain an ankle. Then she would have to stay . . .

Slip! Zip—*splash!*

Stubbornness, recklessness and mischief were all combined in that impulsive misstep. Over the cliff and into the water Elsa plunged.

On the instant Wayne Champlin dived after her. He dived in shallow water. It was low tide, and he feared the girl had struck a rock floor a few feet under the surface.

But the water was deep here; it had carved out new caverns beneath this surface in his ten years of absence. Champlin followed the girl down. He seized her and she came up in his arms. With one searching look, he swept away her pretense of hurt and drew a guilty smile from her lips.

"That's the same smile you gave me the first time I rescued you at the city beach," he said, his dark eyes burning. "I'll keep it in mind until I see you again. Let's be off."

"Listen!" Elsa breathed.

Above the lapping of the waters harsh voices sounded from the distance. A hundred yards or more along the shore cliff were three figures, silhouetted against the yellow dawn. Two of them were Disps, the third was a stocky ragged Grubber.

"Look! They're beating him!" the girl gasped.

Champlin plunged for the shore. "They've got him for vulcatching!"

Elsa had already learned about the crime of vulcatching. The name came from the vulcatcher, the yellow bird that would steal grain out of the fields. Grubbers who hid away some of their crops in caches, instead of turning it all in to the storehouses of the Higher-ups, were spied out by the Disps.

Champlin paused at the brink of the cliff.

"He'll be lucky to get off with a beating!"

Using their spears as rods, the Disps laid on. Their arms lashed the air with swift rhythm.

"They—they're killing—" The girl's voice choked.

"By God! It's old Perribone!"

Champlin bounded over the wall. Elsa tried to pull him back.

"No, Wayne! Not yet! No!"

HE was away from her. Then he stopped, and his long shadow that fell before her was motionless. She saw, too, the strange thing that was about to happen.

From a few yards beyond the lashing spears a new figure appeared—a bushy-bearded skeleton of a man wearing almost no clothes. He scrambled up over the jagged bank. A heavy stone was in each of his hands. He touched them to the ground as he bounded along, for one of his legs was twisted like a pretzel.

He pounced with the strength of a madman. The Disps were caught unawares. His stones crushed down, the first on the back of a head, the second on a terrified face. The Disps went down.

The wild man hammered them as if he were killing rattlesnakes. He pounded their flesh into the yellow earth.

Champlin raced to the scene as hard as he could go. He saw his friend Perribone roll out of danger weakly. Then the beaten man lay still.

But before Wayne Champlin reached them, the bushy-bearded, mad-eyed cripple loped over the cliff and out of sight as swiftly as he had come.

Before Champlin now lay three bloody masses of human flesh. The two in the uniforms were battered beyond recognition.

The third, old Perribone, opened his eyes to look up at his young friend.

"Champ!" he whispered. "They told me you'd come—"

"Take it easy, Perry," said Champlin, examining the man's lacerated flesh. "You've got to live. We need you!"

The battered, white-faced man nodded weakly. But out of the corner of his eye he could see the two dead Disps. He realized that hell was about to break loose.

From the Grubbers' shanties people were coming—too many of them. Their glimpse of the fight had routed them out like hornets. They had forgotten caution.

"*Go back!*" Champlin shouted. "For God's sake, *go back!*" We waved at them frantically.

It was too late. Observers in the Disps' headquarters had seen the crowd gathering, and a crowd was their dish. Like a battalion of soldiers hurled out of a catapult, the purple and gold men stormed out of their barracks.

In a moment they were on their way down the hill full speed. Not running, nor riding—but *sliding!* They came like a line of ski jumpers, sliding down the mile-long slippery slides that led from the food storehouses to all parts of the island. In a few minutes those chutes would convey the morning's rations of food. But in an emergency like this, they bore the cruel instruments of death.

On greased soles the Disps rode. Their silk shirts fluttered in the wind, the yellow feather of each headdress cut the air, each black sword or spear waved aloft with the promise of slaughter. In a swift stream they came on, as if skimming over the land in upright flight.

"We're in for it!" Champlin muttered. "Who was it that dashed these devils' brains out, Perry? He's a hero if he can get away with it."

Perribone stared glassily. He was about to die.

"Who was it?" Champ demanded. "Was it old Jake Douzel?"

"It was . . . still, it *couldn't* be," the dying man gasped. "Jake's been dead . . . three . . . years."

CHAPTER III

Behind the Bars

LEAPING from the ends of the hillside chutes, the Disps came on the run. At once Wayne Champlin and his dying friend and the two crushed corpses were encircled with swordsmen. A second circle formed around the first; the circumference of spears pointed outward to hold off the gathering throngs of Grubbers.

The captain of the Disciplinarians strode up last of all. A path opened for him and he marched to the center of the ring, fuming with rage. Upon critical inspection of his two dead men he roared like a wounded bull.

He swung his broadsword menacingly and took a step toward Wayne Champlin.

"Well?"

"They were beating Perribone with spears," Champlin spoke up sharply. "Someone came past and stopped them."

"Stopped them!" the captain bellowed. *"Someone!* You'll roast in the Fury's teeth for this!"

"Sorry, but I can't claim the honors," Champlin snapped.

"Honors!" the captain fumed. "Why, you damned defiant— Who the devil are you? Where'd you come from?"

"I'm a Grubber. I was born here."

"You're a stranger! I never saw you before."

"I've seen you," Champlin replied coolly. "You're Ivan Scorpledge, the captain of the Disps."

The captain drew back in surprise.

"I haven't forgotten," Champlin continued, biting his words savagely, "that you conducted John Champlin and his wife to the Shrine some sixteen years ago!"

Captain Scorpledge went white. His memory shot back to the incident of a first-born child who miraculously escaped the Purple Fury, but whose parents paid with their own lives when their guilt of hiding him was found out.

"Young Champlin!" Ivan Scorpledge hissed through his teeth. "I think I'm going to enjoy this."

A sickly moan escaped the lips of old Perribone. His back was broken, his lifeblood was leaking away, but he was still keenly conscious of what was happening.

"Champ ... didn't ... kill ..."

"No? Then who did?"

"Jake ... Douzel ..."

"More of your damned ghost stuff! Get up from there, Perribone! You'll answer to the Purple Fury! *Get up!"*

The dying man responded with a slight sneer. There wasn't any get-up left in him.

"What the hell?" one of the officers muttered. "A mangled body's no good to the Purple Fury. Besides he won't live till feeding time."

"You're right!" Scorpledge snapped, and with that he swung his sword overhead and brought it down with terrific force. The stroke severed Perribone's head from his body.

Elsa, watching from the edge of the cliff, saw the head fall away. She saw the swords wave and heard the Disps shout their orders. On the instant the circle broke into motion. With Champlin, their only prisoner, in the center of the formation, the Disps tore away on a dead run.

Zigzagging along the hill trails at full speed their shouts fell into a rhythmic, savage, deep-throated chant.

"Feed the Fury! Feed the Fury! Feed the Purple Fur-ee!"

IN their wake they left a few fallen Grubbers, stout-hearted, foolhardy rebels who had given chase only to be struck down with spears. The dashing Disps stopped near the summit, at the low black door in the hillside: a prison cell carved in the living rock.

Elsa was stunned beyond words. Listlessly she joined the throngs of Grubbers. They were a panting, fuming lot, full of flaming fury, but without a ghost of a chance to fight.

"We're paralyzed!" muttered Shorty Joe sullenly. "We were all set to follow Champ. Here we are like so many limbs on a tree and a cyclone carries the trunk away."

"Trunk," Elsa echoed absently. Then she thought of the traveling bag that Champ had brought. Champ had spoken of weapons—

But the Disps were a jump ahead. A small detachment had been left to take care of the bodies, and another small party had started to search the shoreline for the rumored ghost of Jake Douzel.

This group had at once stumbled upon the two bags of luggage. They came up over the bank proudly carrying their plunder. Several of them were armed with shining pistols, and adorned with arrogant grins as if confident that they had nipped a revolution in the bud. Hooting and jeering, they chased away.

The Grubbers turned to the food chutes and awaited their breakfasts. Elsa was one of them now. The food that slid down the long slides was far too scanty; for however much the keepers of the storehouse might put in at the top, each of the upper levels had the privilege of taking out all they wanted. Only a small fraction of the food found its way to the chute bottom.

But such as there was, the Grubbers shared freely with Elsa.

Through the day they talked in low voices. They went about their work as usual. Frequently a party of Disps would come chasing around the hillside, or their colors would be seen flying down the food chutes. But the Grubbers were not easily intimidated. Desperate plans grapevined through their ranks. They must save their leader!

By nightfall the consoling rumor arrived. The Purple Fury had not yet whispered a judgment regarding Wayne Champlin's guilt. Until a whisper was heard, Champlin would stay in prison.

Elsa could not sleep. Her new friends had warned her that it would be suicidal to attempt to visit the prison. The Grubbers' own scouts had tried, were still trying, under the blanket of darkness. She must wait until communication was established. Champ, if he could be contacted, would be sure to have a plan.

Shortly before dawn Elsa heard low voices. A scout had gotten through the sleepy guards for a moment's chat—enough to learn that Champ did have a plan. If he were only allowed to stay in prison long enough—

Elsa didn't wait to hear more. She slipped out the rear door of the shanty and threaded her way through the waning blackness.

WAYNE CHAMPLIN was alert to everything. The smell of limestone, mingled with the fumes from the Purple Shrine, filled his nostrils. The dampness of the stone cell was upon his ears, for he had spent the long hours listening to the mysterious roar that resounded through the floor of his cell.

"It's only the roaring gas that feeds that damned blaze," he kept telling himself. Then he would listen again; then curse himself for conjuring up demons. Demons! Shrine! Sacred fires—

Hell! His smattering of geology blasted those superstitions to bits. Why, this was nothing but an inexhaustible gas well!

BUT that fact got him nowhere. If he couldn't break out of this jail before some smooth-tongued Summiteer laid claim to hearing the demon's whisper, his little mutinous flash in the pan was over.

Champlin had no doubt on one score. He wouldn't be chewed up by any mythical monster. He'd be cremated!

Yet if they would only dilly-dally around a few days till he could get his plan well laid it wouldn't make any difference what happened to him. Except for Elsa. Elsa! Had she seen?

Did she know he was here — or had she struck out for the mainland when he left her? Had she seen him fall, on that chase up the hillside—seen him fight and try to break out, only to be jabbed with spears like a tiger and dragged by a rope to these prison bars . . .

"Champ!" came a low whisper. "Champ! Are you there?"

Champlin came up with a start. Through the nearly impenetrable gray of the dawn he saw Elsa, her half-clad white form camouflaged against the limestone wall just outside his bars. At once his face was against hers.

"Champ!" the girl breathed. "Your hands!" She felt the bloodstains over his arms and chest.

"I'm okay," he whispered tensely. "But you won't be if you stay here." In desperate tones he warned her. "Don't waste any time getting back. Have Shorty Joe get through tomorrow night if he can, and I'll give him my plan. And be sure to get the guns I brought—"

An awakening groan from one of the guards cut their conversation off. Champlin gave the girl's arm a slight push, a signal for her to run. The guards roused up. Elsa ran.

Abruptly she stopped. In the road before her stood Ivan Scorpledge. She could not mistake his hulking outline nor his jarring growl.

A path leading up the hill was barely visible in the gray light. *Up* was a dangerous direction, but she had no time to think of that. She bounded like a rabbit.

Scorpledge plunged after her like a wolf, seized her hair, grabbed her shoulder. His ugly brutal smile bore down upon her.

"So you're the gal that came with Cham—"

Slap! Her hand struck him across the cheek.

He laughed through his teeth. "Scrappy little devil, ain't you! You've got a kiss for me, I'll bet!"

The grip on the girl's wrist tightened. She uttered a half-stifled cry. She squirmed and fought, but the big man hurled her brutally to the earth and laughed at her.

At that instant footsteps came *slap-slapping* down the path from one of the vaguely visible mansions. Scorpledge recoiled.

"What the hell?" snapped a strange voice. "Trying to make off with my girl friend?"

"*Your* girl friend?" Scorpledge barked. "What the devil are you Summiteers doing up this time of morning?"

The arrogant young Summiteer retorted with sharp sarcasm,

"Saying our prayers to the Purple Fury. And I just heard a whisper, Scorpledge," he faced the big man with an insulting glare, "that the girl's going to be mine as soon as—"

Elsa heard no more, for she leaped to her feet and scampered away. Her

heart was beating furiously. She thought surely the men would pursue her; but they were deadlocked in a glare at each other. She raced down the zigzag trail to report her findings to Shorty Joe Sanburn.

Through the swift, intense day she wondered about the sarcastic young Summiteer. Evidently he had awakened out of a light sleep, for he had been dressed in sleeping garments. Little did she guess that he had watched her through field glasses on the previous day, and was watching her now, plotting and planning her fate.

But most of all, she wondered about Champ and whether Shorty Joe could reach him before another dawn, and what their plans would be when Champ learned that the guns were gone.

Before another dawn—*fate was destined to strike!*

CHAPTER IV

Into the Inferno

THE sun went down, the sky darkened. Torchlights ascended the spiral roads.

As in the grip of a nightmare, Elsa followed along with the others. The Grubbers were whiter and quieter than ever before. They seemed stunned, paralyzed. Or were they strung through with electric tensions that would unleash all hell at the touch of a trigger?

They carried their few corn knives, their largest torches, their wooden-handled metal-tipped tools. They carried stones. They trudged as if they were walking an endless treadmill.

Now the Higher-ups were all assembled in orderly fashion, and their section of the hilltop was demarcated by a fence of spears. Above them the Shrine burned with its usual brilliance, no more nor less. Their orange torches were pale in contrast; just as their lust for this orgy, so they pretended, was pale beside that of the smoky monster, their god.

A large party of the purple and gold Disps now rushed, in step to the rhythmic "Feed the Fury!" to the hillside prison.

Elsa edged away from the thronging Grubbers. She skipped into a deep shadow, followed it down the hillside a short distance. It was the shadow of the long-armed machine — the feeding chute. She hesitated, wondering whether she could dash to the prison door before the Disps finished their bloodthirsty ritual of chanting and circling.

Suddenly the arm of the feeding machine swung to one side, and the girl stood in the full light of the purple blaze. She ran.

"One word with him!" she cried through her breath. "One last word!"

"Get back!" a voice shouted at her. It was the young Summiteer who had challenged Ivan Scorpledge. "Don't be a fool!"

Then Ivan Scorpledge himself took up the cry, as if prompted by his superior.

"Get the hell out of here!"

Other Grubbers had followed Elsa in her foolhardy dash, and at once the whole weight of the Grubber mob surged toward the prison.

Stones flew through the air. Torches turned into clubs to whip through the blackness, sending off comet tails of red sparks. Hoes and rakes and axes flashed, and here and there a corn knife gleamed.

The ranks of the Disps trembled momentarily. Swords slashed out and corn knives went down. But it was not a sword nor a spear nor a club that cut the battle short. It was the barking of pistols.

Crack-crack-crack! Crack-crack!

Five Grubbers tumbled and kicked and changed to lifeless heaps for their fellows to stumble and trip upon.

Crack! Crack! A woman and her husband fell. The arrow-head of the mob stalled. The Disps nimbly advanced, gunmen foremost.

The Grubbers moved the only way they could move—backward. Even as they retreated, a few of them fell wounded or dead.

"Hold it!" the arrogant young Summiteer snapped, and the hulking captain of the Disciplinarians repeated the order in a loud voice.

"Hold it! Keep 'em back! Get on with the ceremony!"

The battle had dealt the severest of setbacks to the Grubbers. Held at bay, they viewed their unfortunate comrades strewn about the ground. They waited, eying the poised guns, hoping for a chance to pick up their wounded. They had not forgotten the brutality that had befallen the dying Perribone. . . .

"Champ says to get back!" The whisper grapevined through the stymied mob. "It's too much sacrifice. You can't win till you get guns."

THE message had come through Elsa. She had somehow wormed back of the Disps for her last word. Hopeless for Wayne Champlin as that word was, she relayed it faithfully. Champ's people would be hers from now on.

"No more sacrifice for Champ!" the whisper went the rounds. "We're to let him go."

In a moment the sadistic ritual was in full swing. It took an unexpected turn from the start but not a hopeful one.

To the chanting of the Higher-ups, the hollow mockery of a debased pagan worship, the fallen Grubbers were picked up, one by one, and conveyed to the feeder. Whether they had been shot dead, or whether they were beating their fists on the ground from the agony of their wounds, one by one they slid down the open chute to disappear in the greedy maw of the Shrine.

With each victim's turn, the chanters stopped for a moment of silence in mock reverence, and in that moment the hideous smoky monster could be seen dimly above the flames, reaching with his clawlike hands. His growl would sound forth. Then he would disappear; and likewise his victim—forever.

At last Wayne Champlin was ushered out of his prison cell. Elsa was close enough to see that his face was dark and brooding; his hands and arms were crusted with blood; his clothes were in tatters. But there was still that certain light in his eye—to the bitter end. They led him toward the unholy machine.

Elsa tried to hide her face in her hands; instead she moved in blind response to some instinct she didn't fully understand. Champ was to have been her mate. Wildly she ran after him.

"Champ! Champ! Oh, God, don't let them—"

She did not see Ivan Scorpledge turn toward her and raise his gun; neither did she see the mocking young Summiteer cut through in front of the gun to thrust her back. But when she fought and pounded and clawed at the Disps who blocked her path, she was dimly aware that it was the surly Summiteer who struck her down. In the white dust of the hillside she lay dazedly, to witness the rest of the tragic sacrifice.

Elsa saw Shorty Joe following along at the outskirts of the execution party. She was uncertain whether he caught Champ's eye. Champ had no time for farewells.

Once in a final burst of fury Wayne Champlin threatened to crash the ring of spears. In quick dodging motions he

leaped back and forth. He plunged low, but three spears dropped down to hem him in. The ring tightened around him. He was forced into the high-walled chute.

No one could tell when the tense chanting died out, for the Grubbers roared their protests to the last.

The outer end of the long chute began to rise, Champlin with it. He was not bound, but armed Disps standing on little elevated platforms on either side of him held him in position with spears as his rise began.

Brown arms whirled the great crank. The polished trough wheeled upward swiftly.

Just before Wayne Champlin slid helplessly into motion he made a vain leap upward. His effort was lost, for he dropped back into the chute—but not altogether lost, for he caught out of the air the corn knife that Shorty Joe hurled to him. A final token of an undying friendship!

Down the incline he flew, holding the knife high. A swift streak of descent was the last that the fascinated throngs saw — the streak that was Wayne Champlin. Down the open slide he shot to disappear through the circular wall of flame.

CHAPTER V

Elsa's Fatal Choice

THE Grubbers grew silent. They caught a momentary glimpse of the gargantuan demon, but they did not flinch. They were too stunned, helpless.

Again the hollow voices of the Higher-ups picked up the mocking chant. The uniformed executioners ran circles around themselves, performing sword and spear rituals that were supposed to be favored by the god after a hearty meal. Abruptly the service ended.

Elsa lay where she had fallen. Torchlights descended to various levels down the hillside. Echoes of skirmishes and harsh commanding voices of the Disps fell meaningless on her ears.

"He's gone . . . He's gone . . . Gone." Her inner cry clung to the words. Her mind could go not further.

Sometime in the night the young Summiteer who had slapped her down came back to see her lying there. He gazed at her with a lustful eye. He sneered at the thought of Ivan Scorpledge, who would easily have killed her rather than lose her to his superior.

But young Clay Malcinder lived nearer the summit than Ivan Scorpledge; so the latter for all his importance as Captain of the Disciplinarians, had to play second fiddle. Clay Malcinder and his parents were in direct communication with the smoky monster. The young Summiteer's lips curled with evil glee at the thought.

Malcinder picked up the limp girl, carried her to his mansion, dumped her on the porch. He went to call his parents to take care of her, for there were other important duties awaiting him . . .

Elsa came to herself dimly, as if out of a long sleep. She looked into the torchlit faces of the elder Malcinders—the gaunt mystic face of the father and the bewildered, too-soft countenance of the mother. The elaborate furnishings of the porch told Elsa in an instant that this was a Summiteer's home.

She fled. Down the hillside she ran, as if by some unerring instinct, shaking the dust of the treacherous Higher-ups from her feet. It was all a mere interval of which she was scarcely conscious. She collapsed on her bed in a Grubber's shanty, still crying to herself,

"He's gone . . . Gone!"

Nor did she regain a grip on herself with the coming of the day. She breathed, her lips spoke words, she ate

the food that friendly people brought to her, but her nerves were only floating dust after an explosion.

"WE can't stop now!" was the war-cry from Shorty Joe Sanburn.

The Grubbers picked up the slogan. Round and round the island it went, lighting the eyes of the downtrodden people with the same indomitable vision that had kept them going for bitter years in the past. But there was a new terror mingled with that vision.

"Our days are numbered," said some. "They mean to make an end of us."

"The only thing left is to migrate," said others.

But migration was forbidden; boat-making was forbidden; and even now the Disps circled the shorelines, lest their enslaved toilers should try to swim away.

A mania of fear gripped the Grubbers. Every shout or shot, every sight of a flashing sword or a fluttering silk uniform drilled them through with horror.

"I'm going somewhere, I don't know where," Shorty Joe whispered to his fellow workers, "but when I come back I'll have weapons!"

BUT the people had no confidence in Shorty Joe. He made extravagant statements, claimed that the Purple Fury was thin air, claimed that he had hurled a knife through it.

And when, two days later, he swam back from the mainland bearing no weapons—bearing nothing, in fact, but the outlandish tale that he had seen corpses of Grubbers that the Purple Fury was supposed to have eaten—his people declared that he had gone crazy.

He sought out Elsa to tell his adventure to her. She listened apathetically. He embellished his story with details. He had seen the naked bodies of the very Grubbers who had been shot a few nights before. Through a crack in a blackened window he had seen them, lying on a basement floor—and he had seen their very bullet marks.

"On the mainland—miles across the water from here?" Elsa asked listlessly.

Shorty Joe nodded eagerly. "In a big house near the seaport. There were some men in the room, packing the corpses into boxes."

"You—you saw *Champ?*"

Joe's eyelids fell. "I—I'm not sure." The lights were so bad, he said, and the shadows so black—and it was all so dizzy and unbelievable.

"Unbelievable," Elsa echoed dazedly, and turned away. The people were right. Joe Sanburn had gone crazy.

That morning Elsa wandered outside for the first time since the night of the feeding. Though her nerves were still benumbed, physically she was feeling a little better.

From high up on the hillside a spy-glass caught sight of her. But Clay Malcinder did not send Ivan Scorpledge and his Disps flying down the food slides to get her. There were other methods, a little slower but just as sure.

Before noon a relayed order got to the bottom of the hill.

"The shoemaker's wife," said one of Elsa's Grubber friends innocently, "wants you to be her guest for today."

"Is it all right?" Elsa asked dubiously.

Of course it was all right, the Grubber assured her, being ignorant of the trickery which the invitation involved. The shoemaker lived on the very next level, and he sometimes did slight favors for the Grubbers. A visit could do no harm.

Elsa went, accordingly; but before she had time to accustom herself to her surroundings, a noisy spear-and-implement maker from the next higher

level dropped down to ask the shoemaker's family and their guest up to his place for the noon meal.

The shoemaker, himself being ignorant as to where this chain had started or where it would end, yielded to social pressure and accepted.

Soon Elsa found herself being towed up the blinding, gushing social waterfalls like a hooked fish. Before she realized that this was an insidious trap, she had risen, step by step, to the level of the Disps.

She recoiled. Terror seized her. She tried to break and run; but this time running was out of the question. The trap had been too cunningly laid. Disps took her by the arms.

Ivan Scorpledge looked on jealously from a distance while the squad of Disps marched the girl up to the highest level of all. She would be the honored guest of one of the island's proudest families, the *Malcinders!*

THE elder Malcinders fed her and put her to bed, locking the door after her.

Days passed—days of tender, overcordial imprisonment.

Clay Malcinder's presence soon became as terrorizing as Scorpledge's had been. His manners were smoother, his talk more subtle, but his true nature was far more treacherous. Gradually these facts came home to Elsa.

Little by little it dawned upon her that Clay Malcinder and his parents were a world apart. The son was completely devoted to the Purple Fury. His single-track mind led him to constant worship. He spent hours, daily and nightly, at his own chosen listening post, awaiting the fearsome whispers that he thought he heard so clearly.

"The Purple Fury will soon answer my prayers," he would say with mock piety.

"I'm sure he will, my son," the father would answer; and the mother would smile, and glance toward the girl to see what impression this "sincere" appeal had made.

Elsa, terrified mouse that she was, did not fail to understand. This family was urging her to accept their faith so that she would be a suitable mate for Clay. They believed that their son's long hours of communion in his private little sanctum would soon bring results.

But all the while, Elsa knew, the Purple Fury was no more than a gigantic hoax to Clay Malcinder. He and a few of his Summiteer friends too obviously relished all their sanctimonious airs as so much comic byplay, when they were out of hearing of such sincere worshipers as Clay's father. They lived in sham and loved it.

Still, Elsa was mystified that Clay Malcinder would actually spend so much of his time within his prayer cave. Many of his confidential friends likewise went to their private hillside caves for hours of pretended devotion.

Once she spoke of following him, for a glimpse of his prayer sanctum. Mrs. Malcinder was horrified. Prayer chambers were hallowed and *private;* and even Clay's parents had never intruded upon their son's sacred cave.

This left Elsa more curious than ever. At the first opportunity she ventured to the stone-arched entrance. She found that the narrow passage turned sharply and led to a solid door. The door was locked. She came away more mystified than before . . .

Someone must have seen her! That evening at the dinner table the atmosphere was tense.

"Until today, Elsa," the father began, after the dinner things had been cleared away, "our all-wise god has been patient with you. But this afternoon he has spoken a sharp command."

The words fell like blows from a hammer. Clay Malcinder and his mother eyed the girl impersonally.

"The Purple Fury has decreed that your trifling must cease," the old man said, his mystic eyes gleaming into the distance. *"You must choose!"*

ELSA waited, afraid to breathe. Clay Malcinder cocked his head, confident that the trick was already won.

"You must choose to follow one path or the other," came the sledgehammer words. "Either the path of Wayne Champlin or that of my own dear son. The Purple Fury advises that you go at once to my son, become his wife, cling to him, and make his ways your ways."

The house was deathly still. Only the dull roar from the purple flame at the hilltop seeped in upon the stillness.

Then Elsa sprang up so suddenly that her chair clattered to the floor.

"Let the Purple Fury tell *me* that!" she screamed.

"Silence! You have no cause to be infuriated," said the old man in his cold, unemotional voice. "If you trifle with sacred things, the Purple Fury is bound to grow impatient—and impatience always whets his appetite. Which do you choose?"

"Wayne Champlin, of course!" the girl blurted.

The Malcinders paled. They crowded closer around her. They did not wish to see her damned, as Wayne Champlin had been, for uttering blasphemy. She must not choose so hastily. Her life was at stake. Champlin's way was the way of the rebel, the unbeliever.

"The news of this momentous whisper has already gone out to all the islanders," Clay Malcinder explained detachedly. "If you make an *unfortunate* choice—" he paused for effect—"they will gather on the hillside this very night."

The girl saw the game clearly now. Wayne Champlin's path led straight into the fires of the Shrine. While Clay Malcinder's path—

For an anguished, tormented moment Elsa tried to glimpse herself sitting here at the top of the world, steeped in sham, winking and mocking at the oppression and starvation and cruelty and heartbreak that descended upon the toiling Grubbers.

The Grubbers! Champ's people—and hers!

"I'll still follow Wayne Champlin," she answered, breathing quiet defiance.

Clay Malcinder rose. His face, though it wore a surly smile, was flushed with inner rage. He bit his words.

"You're stalling just to make a play for me. You're pretending not to be overwhelmed by your good fortune of winning me so easily—"

"Good fortune!" Elsa echoed in a bitter voice. She picked up her chair and held it to her defensively. She shrieked with outraged feelings and shrank to the farthest corner of the room, laughing and crying hysterically.

"Good fortune! Death is the best fortune I could hope for, now that you've taken Champ!"

Under the shocked eyes of his parents, Clay Malcinder stormed out of the house. He was a power unto himself. The Purple Fury was putty in his hands, and he couldn't stand to be defied by any mere human being.

Supreme cynic that he was, he couldn't endure mockery in any form, even if it were only an hysterical laugh.

But his rage would have a ready outlet. Not simply a quick, drab murder, but another spectacular public sacrifice, adorned with all those cruel splendors that were his food and drink.

Tonight—tonight! And on the impulse Clay Malcinder dispatched a corps of guards.

THEN as he stood on his porch, drinking in the wine of pleasurable anticipation, a slightly disturbing note jarred upon his consciousness—a bit of news that made him eager to rush the sacrifice through with all possible haste.

The disturbing note approached in the form of Ivan Scorpledge.

"I wish to see your father," Scorpledge growled.

"What about?"

"A rumor."

The elder Malcinder appeared on the porch.

"What is it?"

"Another ghost has shown up," Scorpledge answered. "The Disps sighted him along the shore cliff. There's no question about it this time. He was one of our late sacrifices."

The old man shook his head and turned away.

"Hallucinations!" he scoffed. "Nothing but crack-brained hallucinations!"

No one could make a sincere worshiper like the elder Malcinder believe any such lies. There was no shaking his faith. He knew that when the sacred monster devoured a victim, not even a ghost of that victim was left. He drew up his shoulders self-righteously and marched back into the house.

"Don't say I didn't warn you," Scorpledge muttered, turning his eyes toward Clay. "And if you want to know who it is—"

"Stop!" Clay Malcinder shouted. He hadn't any intention of letting any damaging rumors reach the ears of Elsa, who was only a wall away. "Go take charge of your Disps. And see that there's no lagging on this job."

UP the hillside the Higher-ups came with their torches to attend the hideous ritual.

Soon Scorpledge was back at the Malcinder mansion with a squad of Disps. They stood like sentinels of death against the white evening sky. Scorpledge marched up to the porch. He and Clay Malcinder again glared at each other, like two poisonous snakes.

"Haven't changed your mind?" Scorpledge rasped in a surly undertone.

"Does the Fury ever countermand a whisper?"

Scorpledge sneered. "So you're going to destroy her *instead.*"

Malcinder's lips curled hatefully.

"I yield to the will of the Purple Fury—*with pleasure,*" he mocked.

The Disps snapped bands upon Elsa's arms and led her away. In her hand was a highly perfumed handkerchief which Malcinder's ever-loving mother had given her to keep her from fainting.

Looking back, she saw the elder Malcinder still kneeling upon the slab of white stone—his private listening post. Lost in devotions to a god of murder! Blind, gullible soul! All the sham in the world might parade before his eyes and he would forever deny it!

The squad of Disps broke into a run. Elsa was forced to keep pace. A dizziness came over her. She stumbled. The Disps jerked at her arms. She came up. She breathed the perfumed handkerchief and tried to keep her head up.

The murderous chant had begun. Dissipated faces leered. It was not often that a beautiful young girl was led to the feeder.

From far below the congregation of Higher-ups came the usual wailing protests, the usual riotous sounds of the hopeless, ineffectual mob. The chanting Higher-ups could not let their unholy pleasures be disturbed. The ceremony proceeded.

The long gleaming feeder swung down to the squad of Disps. Elsa was lifted into it. She gasped at her hand-

kerchief as a suffocating man chokes for air.

The tube rose. The chanting stopped. The girl began to slide.

CHAPTER VI

Escape!

TEN days before, they had fed Wayne Champlin to the Purple Fury.

When Champlin shot down through the circle of flames, he underwent all the sensations of entering death—*except death itself!*

For a long second after that burning plunge—for it was like cutting across the path of a gigantic blow torch—he could not realize that he was not dying. He was not caught in the altar, he was not being cremated by a gas blaze, much less was he being gobbled up by a monster. But he was *falling!*

Did the Shrine rest over a bottomless pit? Down, down he plummeted!

He fell past some lights—something that was like a room. Then—*kr-r-r-ripppp!* He was caught by a deep net.

The net couched his fall, sinking as if suspended by rubber ropes.

In the flash of that fall Champlin's burning wonderment took a hundred impossible twists and turns and ended in a huge question mark. What the devil—

The net began to lift. One glance up the black shaft through which he had fallen told him volumes. It was not a straight shaft like a well. It was a pit that bellied out like a bell; indeed, the very cone-shaped hill on which the Shrine sat must be nothing more than a hollow shell of limestone.

Now, looking up into the point of this hollow hilltop, Wayne Champlin could see the altar of the Shrine—*from underneath.* The purple fires reflected down like a dim sun pouring through the vaulted dome of a great building from a hole at the top.

But the sight that shook Champlin from these sudden bewildering discoveries was the spacious, lighted shelf built near the top of this colossal limestone dome. Brilliantly lighted, the shelf circled the interior like an overhanging balcony. Standing on that structure were men — Summiteers — some of whom Champlin recognized.

There was no time to look at the shining, formidable instruments and the high-powered machines they were tending, for on the instant Champlin saw that his trail led into the very jaws of death.

He saw one of his fellow Grubbers, a wounded woman, being carted along the shelf's edge on a rolling bed. She was naked and bleeding. She was struggling, moaning with pain—*until she rolled under the flaring light.* Then her struggles ceased and her moaning died away. She was wheeled out of sight.

What sort of death mill was this, anyhow? Obviously it was the ultimate fate for every victim of the Purple Fury.

Champlin's net was elevating rapidly. Three Summiteers waited to take him—not with their bare hands, but with a huge power-driven cage.

The cage swung out, opening into two steel jaws. It stopped directly above the rising net. Champlin saw that it was a matter of seconds until that cage would close over him, net and all.

In his hand was the corn knife that Shorty Joe had thrown him. He stabbed at the cords of the net like a thrashing machine. He swung himself out through the gash, still clinging perilously with one hand.

He glanced down. How far might it be through that impenetrable dark?

He released his knife. As it fell he counted.

A moment of waiting—then, *sploosh!* Deep water! He let go the net; the closing cage scraped his arms as he fell.

FROM his count, Wayne Champlin had estimated the drop to be at least a hundred feet. He had once done an eighty-foot dive, and he remembered it vividly.

He turned slowly through the blackness—blackness—blackness! It was maddening.

Sploosh!

The unseen surface flew up at him like a floor. He pierced it as squarely as a plummeting bomb. At the risk of breaking his back, he cut his swift course upward; and luckily so, for he scraped rocks that projected from the bottom.

Lights were on him as he bobbed up. He caught half a breath, went down, sped far to one side. Three thuds like plunging bullets pounded against his ears.

Cautiously he came up behind a protecting barrier. The lights that swept back and forth couldn't catch him here. For the moment he was safe.

He breathed hard. For the first time, he was aware of the painful burning over the skin of his legs. He hadn't been suspended under the altar blazes to emerge unscathed.

The slick moist ceiling of this gigantic cavern now became dimly visible, the lights reflecting along its bumpy water-eaten surfaces. Wayne Champlin had the feeling of being imprisoned within the shell of a starfish of mountainous proportions. Numerous caverns branched off from the colossal bell-shaped room. The low roar he heard was more than the echo of purple fire above. It was thousands of little waves resounding through thousands of caves —a bit of the ocean imprisoned.

A dark object was lowered down from aloft. Champlin's breathing spell was over. The object was an inflated rubber boat occupied by two Summiteers. In a moment they were on the surface, unhitching.

Champlin waited to see which direction they would take. One of them worked the flashlight, and held a gun ready—one of Champlin's new pistols. The other paddled. They came toward him.

He slipped under silently. He could not be seen swimming under these black waters. But he was still more at sea than ever as to their motives. Murder, certainly. Sadistic, cruel, heartless murder had been back of all their ritualistic fol-de-rol. But what of all those gleaming machines that lined that balcony? His burning curiosity, together with his need for a fresh breath, brought Champlin to the surface.

It was a mistake. From across the water the flashlight swept over him. A shot thundered through the caverns. A bullet ripped into the ceiling somewhere beyond him, and a row of little stalactites splashed into the water.

Champlin swam for dear life. He swam deep—but not toward one of the protecting rocks as his pursuers suspected; nor yet for one of the endless branch caverns. There was another little matter on his mind that must be cared for before he struck out; for any branch cavern he chose might turn out to be a dead-end.

He swam squarely for the center of the big chamber, and when he was directly beneath the Shrine he fought for depth.

He crawled down through the wilderness of slimy ragged rocks. His lungs were almost bursting, but he kept groping, he held on; and at the last possible moment of his endurance, luck was with

him. He found the knife he had purposely dropped to test the depth.

Up to the surface like a cork, he caught his breath, bobbed under and was away before the spotlight and bullets bore down upon his wake.

HE jammed the knife through his belt. For the next ten minutes he sped deep into one of the branch caverns. Each time he came up for air, he saw that the surface of the water and the ceiling were drawing closer together. He was evidently headed for a dead-end; but that did not worry him now, for he had at last shaken his pursuers.

Strange, Wayne Champlin thought, as he dragged himself up on a shelf above the water's surface, into those deceptive formations nature will mold its stalactites and stalagmites. Dim though the light was, gleaming along the slick ceilings from distant points, he could see a stalagmite a few feet in front of him whose size and shape was that of a man—a bushy-bearded man.

Perhaps it was too thin for a perfect resemblance; its bones were too prominent. It was more like a skeleton, except for its eyes; which, for all the darkness, struck Champlin's imagination as being a perfect representation of lusterless human orbs.

The eyes winked, the skeleton breathed, it spoke.

"You beat them out of *your* hide too!"

The voice was weak and cracked like the crowing of a sick rooster. The skeleton came closer.

CHAPTER VII

Douzel's Last Stand

"JAKE DOUZEL!" Champlin exclaimed. "What are you doing here?"

"Watching you put it over those nasty devils," the skeleton replied. Then with a crackle of surprise, "How'd you know who I am?"

"I saw you the morning you killed the two Disps. A fine job, Douzel."

"You think I'm a ghost, don't you? Of course you do! Everybody does. I can't come near anyone. They run from me."

"You're not a ghost," said Champlin. "Far from it."

"I don't know whether I am or not. I don't know anything any more. I'd forgot my name till you called it just now. I'm all knocked to hell. But I beat them out of my hide!"

In the dim light Champlin could see the gleam of fiery pride in the sallow face. But for that gleam, this grotesque figure might have been a dead, dehydrated human, echoing the cackling voice of a machine.

"I beat them out of my hide, same as you did." Eagerly Jake Douzel told his story. When he fell, something had gone wrong with the net, and he had spilled over the side for a long drop.

"I didn't get away with no handsome dive, like you did, Champ. Had a high tide with me too, but all the same I crushed my leg to pieces."

"Lucky to get off with that."

"Hell, yes. There ain't been another to cheat them till you done it."

"Do you *live* in here somewhere?" Champlin asked, as the crippled skeleton led the way along the dark rocky path.

"Back and forth," said Douzel.

His talk became incoherent. He talked of his private fire, that the Summiteers never saw. He mentioned stealing food at night from the vulcatcher caches. He talked of starving, of eating fish and eels, of getting lost in the endless caves, of never being able to remember the way out.

"Then there *is* a way to swim out of

here?" Champlin asked eagerly.

"Sometimes there is and sometimes there ain't. It depends. If I'm trying to find a way out, there ain't."

"But that time you happened out on the surface to kill those two Disps—"

"That's the only time I ever found it when I wanted it," Douzel muttered. On that occasion he had heard the Summiteers talk over their plans, and he knew that Disps were being sent down to get Perribone for vulcatching.

Champlin was on fire with interest now.

"Then you can get close enough to yonder balcony to hear them talking? You know what all those machines are about? You're onto their game?"

"Don't know nothing," Douzel cracked. "Don't remember nothing I used to know. But you can get close, all right. Close enough for them to spit in your eye."

He paused to gaze at Champlin's corn knife.

"I wish to God we could get clean *to* them. We'd cut them in strips."

Deep within a tunnel above the water level they came upon a tiny purple fire, Douzel's underground refuge. The fire had been burning ever since he had first lighted it; for upon discovering this hideaway he had smelled the strange odor of escaping gas,* and had had the good sense to make use of its illumination.

Innumerable skeletons of fish were heaped in a corner. Fish were the principal diet in this hermit camp, though there were also small supplies of grain and moldly bread.

The thought of food was an inspiration to Champlin. A few minutes of hand fishing among the crags yielded results. With a hearty meal of fresh fried fish, the two refugees felt more like men, less like ghosts.

Among Douzel's supplies was some grease, which Champlin applied as salve to his burns and spear wounds. Then he slept for hours on end.

TWO lines of action were prodding at Wayne Champlin's mind as he awakened. First he must find the way to swim out of here. Secondly, he must get a line on what this ritual-encrusted death mill was all about.

Jake Douzel led the way. Dragging his crippled leg with remarkable energy, he bounded along a tortuous dark ascent. Champlin felt like a blind man feeling his way through a lost world. The centuries of waves and mists and oozing moisture had eaten away countless nooks and alcoves in the limestone, and here and there were stalactites for hand holds.

"Here," the crippled ghost whispered tensely. "This is the top."

The nook was a scanty fifty feet from the balcony at the top. Champlin could see that the trail ended here. Further ascent toward the Summiteers' stronghold would be as impossible as climbing the inside of a cathedral dome whose walls were greased. But at any rate, the show could be seen from here; and even the acoustics were passable, so long as the caverns were not roaring too loudly with waves.

The voice of one of the Summiteers carried down to them with startling clarity.

"Malcinder!" the Summiteer called.

"He'll be here at once," another Summiteer answered. "Are the new Disps ready? Bring them in."

* Natural gas is known to escape from the earth in caves, and in certain locales of the earth in exactly this manner, and can be lit. The Purple Fury is thus only a natural gas well which flows continually, and was ignited by the priests and used as a means of gaining their power through superstition and fear. This is not an unknown phenomenon, and indeed, is quite common in our own Southwest. Yellowstone Park has many such gas fumaroles.—Ed.

A string of seven or eight spruced-up young Disps filed into the balcony. The artificial lights shone through their silk purple and gold shirts. In a moment Clay Malcinder strode around from the other side, faced them sternly.

At the sight of Malcinder, Champlin's fists tightened. Well remembered was the glee with which Clay Malcinder had witnessed the sacrifice of his parents. Many were the insults that Wayne Champlin had endured as a boy from this arrogant, cruel Summiteer. But never had Champlin's fists had a chance at that proud face, for Summiteer children were always too well protected. They were never to be caught out in the open.

"What's happening here?" Champlin whispered to the bushy-bearded skeleton beside him. "Initiation?"

"If you figure it out, tell me," Douzel returned. "They don't talk sense up there."

Champlin watched breathlessly. These young Disps were to be treated to the innermost secrets of the Summiteers.

"Your good work against the rebellious Grubbers," Malcinder spoke crisply, and there was no mockery in his voice now, "proves that you have a healthy taste for blood. You have earned the right to be introduced into the mysteries that underlie this Shrine.

"Many of the Higher-ups — even some of the Summiteers themselves," Malcinder continued, "don't have the stomach for these facts I'm going to tell you. My own parents, I'm ashamed to say, have closed their eyes to the whole business. They prefer simply to believe in the monster god of their childhood. But there is more. It has taken more than a smoky monster to make this island one of the world's most dependable human body marts."

HE paused, searched the faces of each of the Disps. Their eager appetites for the bloody business initiated by their superiors reassured him.

"Some lily-livers would consider this enterprise cold-blooded; but I don't see any weak sisters among you. The selling of human bodies is simply a business, and no Summiteer or Disp mixes sentiment with his business. After all, there's nothing sentimental about the body of a Grubber.

The Disps laughed lightly, and their response pleased Clay Malcinder. He explained then that this selling of human bodies had been the business of the Summiteers for generations. The wealth they and the Disps rolled in came not from the Grubbers' toil but from the Grubbers' corpses.

"Our chief market is AHDA — the Asiatic Human Dissection Association. AHDA can order bodies of any age or sex. We can supply them within days.

"You are already familiar with the method by which these bodies are secured: the sacred — ahem!—ritual of sacrifice. But as to the means of preparing our products for shipment—let us demonstrate."

One of the assisting Summiteers drew back a curtain to reveal a number of naked forms lying on a bench — the harvest from the recent Grubber encounter.

The shipping port, Malcinder revealed, was on the mainland some five miles distant. Quick transportation to that point was afforded by a natural water-filled tunnel which had been equipped with power-drawn cables.

"Here is the car," said one of the Summiteers, indicating a long watertight, coffin-shaped box that clung to the cable. He opened it. It was large enough for two or three bodies. It could be opened, moreover, from the inside. Thus it was usable by the Sum-

miteers for their own transportation to the mainland station. Apparently they did not mind riding as passengers in a compartment which corpses would occupy on the next trip.

"I'll go over now," said the Summiteer, crawling into the car. "Send the bodies after me. I'll unload them and box them up for shipment." The Summiteer closed himself in. In the days to come, Wayne Champlin was to see this process frequently repeated by Summiteers who chanced to have duties on the mainland.

Malcinder touched a silvery lever, the car accelerated down the inclined cable track. It melted off into the blackness and splashed into the water level like a torpedo. Automatically it gained speed. In three minutes it was across.

The Disps stayed to see the empty car return. They were told to load it with bodies. It was then that one of the Disps, who had been engrossed in the array of scientific paraphernalia, asked the vital question.

"Are these bodies dead?"

As he blurted the words a body slipped from his arms; something in the touch had amazed him.

Clay Malcinder answered.

"We've learned many things about preserving bodies for dissection here in this laboratory—having had an abundance of 'raw material'," he said.

He glanced at the row of vari-colored glowing lamps, the shelves of serums, the urns of powders, the operating tables. It was here, obviously, that the bodies were prepared for preservation.

"Our most important discovery is that AHDA pays us splendidly if the bodies are still alive—or, I might say, nearly so."

WAYNE CHAMPLIN caught his breath. But none of the young Disps, he noted, recoiled in the slightest. Their sadistic faces beamed eagerly.

"We've invented a sleeping death," said Malcinder proudly. "Our secret treatment makes the body as easily handled as if it were dead; though for the purposes of dissection it remains alive for years — or until it is dissected away."*

At this Champlin thought he caught just a shade of discomfort in the attitude of one of the Disps, who asked,

"In this sleeping death, do they still hear, and know, and feel?"

Clay Malcinder smiled evilly. "And if they do, what's the difference? They're only Grubbers."

He closed the car, snapped the silvery lever, and the three bodies shot away on their unknown adventure. Malcinder turned his attention to the invoice of the "raw material" on hand.

"Where's Champlin?" he barked peremptorily.

A Summiteer jerked a thumb toward the railing.

"Down there somewhere. He slipped through the net. But one of the boys plugged him with a bullet."

"Get the body up here!"

"That is, they *think* they plugged him. He went down and they couldn't find him—"

The air turned blue as Malcinder

* The Summiteers, by means of their special laboratory apparatus within the Shrine's dome, had found a method of permanent suspended animation. Doubtless this method was a scientific improvement on early 20th century embalming practices. The Russians are the best known practitioners of this art today, the embalmed remains of Nikolai Lenin having lain in state in Moscow since the death of the Russian revolutionary leader in 1924. Use of human bodies for surgical dissection—dead bodies, of course—goes back for hundreds of years. But vivisection—the cutting up of living bodies—has always been confined to animals such as rabbits and dogs, and it is a practice long bitterly fought by humane societies. Ruthless surgeons, however, would doubtless feel no qualms in cutting up living animals.—Ed.

strode around the balcony blowing off steam. He fired the young Disps off with orders to Ivan Scorpledge to send some veterans in for a search for the lost body.

"It's more than just losing a body," he growled, when only his confidential Summiteers, so he thought, were within hearing. The caverns echoed his growl.

"I hear you're praying," one of his companions chuckled, "for Champlin's girl to come your way."

"Praying for her! I'm waiting for her. She's been hiding out since that man of hers went down the chute. What's more, I've had to tell that damned Scorpledge just where he stands a couple times. But of all things, I don't want a ghost of Champlin bobbing up!"

Champlin thumped at Douzel's arm and whispered a sharp command. It was time to find the way out of here.

"I don't know if I can find it—" Douzel began.

"You've got to! No time to lose!"

They scrambled down the perilous black trail as hard as they could go. But Champlin had underestimated the speed of the Disps. As he and Douzel swam toward the central cavern, they found the waters alive with rubber boats.

A light flashed out of a nearby alcove. The two swimmers ducked under, and Champlin cut for the farther side. But Jake Douzel's luck for once was against him. He came up not four feet in front of a boat.

Champlin looked back in time to see it happen. A Disp dashed down with his sword and split the grizzled old skull wide open.

CHAPTER VIII

Hours of Wrath

WAYNE CHAMPLIN'S last glimpse of Jake Douzel would haunt him for days. Hours later, when he huddled safely in a lost cavern after the most furious underwater swimming of his life, Champlin couldn't help harking back to that bushy-bearded skeleton's violent death.

For three years Douzel had cheated the Summiteers out of his body. Now in one hasty act of friendship for Champlin, he had run squarely into death.

And—the irony of it!—they hadn't considered his body worth saving! Miserable heap of skin and bones that it was, they had dashed the brains out and let it sink to the bottom like a rock.

Champlin took a deep breath. Where among these thousands of caves should he begin his search for Douzel's channel to the outside world? How could he get out, now that Douzel was gone?

He plunged into the water. His senses were never more alert. This very hour, he would start constructing a mental map of these caverns until he found the place he was looking for.

Hours later he returned to Douzel's cave, exhausted. A map of these caves would be as complicated as the orbits of the planets. His burning question loomed up like a terrifying phantom.

During the next nine days and nights, that phantom grew until it nearly blotted out Wayne Champlin's whole horizon. The map in his mind became blurry. All caves came to look and feel alike. All of them were black and full of obstructions; all were interwoven with others; all were flooded with water.

He camped at Douzel's fire, fed on fish and the remains of the stolen grain, tried to rest between periods of searching.

But his sleep was filled with murderous faces of Scorpledges and the hungry pain-stricken faces of Grubbers. Or he would have visions of Malcinder—those

hateful sly eyes—those treacherous lips, weaving lies and laying traps for Elsa . . .

Then came the day at Douzel's listening post that struck the ultimate horror through Champlin. He learned that Elsa was to be forced into a marriage with Clay Malcinder. If she refused, she would be fed to the Fury that night!

The Summiteers talked the matter over with a glow of eagerness. Plainly they hoped that the girl would refuse to go through with the marriage. Not that they had ill wishes toward Malcinder. But they knew that he would not hesitate to go through with his proposition. And it was not often that the hideous laboratory received such a prize as this girl. The Summiteers checked over their instruments and went out.

WAYNE CHAMPLIN was near to fighting the walls with his bare fists, when something in the back of his mind went ablaze. It was only the wildest of chances, but—

The balcony was empty when he first started throwing the stones. Stones crashed into urns of powders, stones knocked out a glowing lamp, stones shattered a shelf of serums. Then a stone struck its mark squarely—*the silvery lever!* In that instant things began to happen.

A motor whirred. The cables went into action. The watertight, coffin-shaped car rode down the inclined track, gathering speed.

Champlin swam — almost flew — across to the point where the cable line disappeared into the water-filled tunnel. By this time it was moving fast. He wanted it to move fast. He sprang, froze onto the cable for dear life, rode with it.

FASTER and faster! The water pounded against his head. Three minutes it would take to get across. Three minutes until his next breath! For unquestionably he would be underwater all the way. If he could hold on —if the bombarding water didn't crush his skull—

The cable rollers along the ceiling snapped past his hands like a picket fence.

Now they slowed up. What was the matter? The cable was retarding! *It stopped!*

Had the car reached its destination already? Champlin's chest was bleeding for air. Hand over hand he drew himself along until he came to the car. But car, cable and Champlin were all still somewhere in the middle of the water-filled tunnel—somewhere beneath the surface of the sea, *stalled!*

Someone had cut off the power!

This was the perfect death trap. Champlin was doubtless more than a mile from air. Even on a fresh breath, that would be an impossible underwater swim. He pictured the hilarity of the Summiteers. They must have guessed what had happened. They had him where they wanted him now—and for lack of a lungful of air, he would perish.

His heart pounded. His head swam. The pressure was terrific. It would be mad to strike out swimming, futile—

He drew himself close to the coffin-shaped car. There was air in that box if he could get to it. Perhaps—

Champlin groped upward through the watery blackness. A natural cup in the rock ceiling above the box gave him a fighting chance. He pounded at the levers and in a split second he had the car open. Air swept out of it toward the cupped rock ceiling.

Under the pressure of the water, the pocket of air was not large; but it was a diving bell on a small scale, and it was good for a few breaths. Champ-

lin's burning head plunged into it.

His lungs drank in deeply. Eleven breaths, twelve breaths, thirteen—

Without warning the cable began to move—*back!*

Champlin caught a final half breath and grabbed on. Back to the big cavern he sped. Once more he had cheated the fates by a narrow margin. As the cable rose from the water, he let go and breathed with a wonderful relief.

But his relief vanished on the spot. A light caught him. Before him was a rubber boat occupied by three Disps. Guns came up. Champlin went underwater like a streak.

What had always appeared to be a very shallow alcove in a straight high wall was his only chance for shelter at the moment. He came up within its blackness. The boat hove in sight and he ducked under—and back—deeper into the wall! In his groping Champlin had discovered a new opening. Three interlocking vertical ridges spread at the low tide level like tree roots. Whatever the risk of being trapped Champlin plunged through.

In another moment he was yards ahead of his pursuers, swimming at full speed through a narrow, high-walled passage—*that led toward a faint light!*

The water grew shallow. He ran and leaped; he crept through dark corners and bounded through spacious rooms—always toward more light!

Were the Disps still on his trail? They wouldn't get far with their boat through this narrow passage. But they were not far behind.

Champlin was almost through. Fifty yards ahead of him was the dazzling white light of day. He dared not show himself against it. He slipped along cautiously.

SUDDENLY a voice cried out not twenty feet ahead, "Ghost!"

"The ghost of Champlin!" another voice shouted, and two Grubbers bounded up, dropped their fishing baskets, and tore through the last few yards of the cavern at a furious rate.

As they disappeared into the outside world, a bullet crashed through the cave and the report roared ominously.

Champlin crept upward to a perilous shelf in the wall, waited. The voices and footsteps were almost under him. To his surprise, the Disps seemed to have suddenly lost interest in the chase. They stopped to talk, and their conversation indicated that they had seen one of the Grubbers and taken him for Champlin.

"It'll be hell to pay," one of them said, "if the girl finds out he's not dead. Tonight's her deadline."

"She's already given her decision," another spoke up. "She said *'no'* so flatly that Malcinder's in a rage. He's already sent out the word. He's feeding her to the Fury tonight. That's why we've got to get back and report."

"Yes, and that's why that damned Champlin has no business being loose. If Malcinder knew, he'd throw his sacred whispers to the winds. He'd give his right arm to kill Champlin outright."

"Any of us would."

"Listen, men," said the third member of the party, who hadn't spoken up to now. "We're not through yet. The Disps guarding the shores may have picked him up by now. But if he sees them first, he'll be right back in here. We'd better push on to daylight."

"Suits me. I'd follow him half across the ocean."

"Keep your light flashing."

Two Disps passed beneath Champlin, wading shoulder to shoulder in the shallow water. One of them held a gun, the other a light. The third man also with a gun, straggled after them.

It was ugly business, but necessary; Champlin made as quick work of it as

possible. He pounced down on the third man, froze onto his gun hand and wrenched the weapon free. The foremost gunman whirled and threw a wild shot against the wall as two bullets from Champlin ripped into his chest. He collapsed, dropping his gun.

The Disp with the light leaped toward the fallen weapon; but his arm flew out helplessly and he fell face down in the water, as Champlin shot him between the eyes.

The gunman upon whom Champlin had fallen at the outset was swiftly dispatched. Of the searching party, the only remaining life was that contained in the flashlight, itself slowly dying to nothing.

Wayne Champlin took one longing look at the out-of-doors only a few yards beyond. His body craved the food and air that were somewhere out there; but his will pointed him back in the opposite direction.

He carried two of the dead Disps back to the rubber boat they had deserted. Evening was falling fast when he came back for the third time and went to work upon the third fallen man. He worked fast. He took the Disp's uniform off and dressed himself in it.

It was no easy matter to get the rubber boat and his two uniformed corpses back through the narrow passage. He was working against time now.

At last Champlin rowed back into the dimly reflected light at the outskirts of the central cavern. He propped the two dead Disps into as natural positions as possible, tying them in place with narrow strips torn from their uniforms. One held the flashlight; the other, a gun. Champlin began to paddle.

NO sooner had he moved into the ring of light from the Purple Fury, than men from the balcony aloft caught sight of the party. Someone shouted orders.

"Hurry up! Malcinder's feeding the Fury at once! What the hell's been keeping you? Scorpledge called assembly half an hour ago."

The ropes came down and Champlin hooked them to the boat. It began to lift.

"What's the report down there? Did you ever get close to Champlin?"

"He got away!" Wayne Champlin shouted back, barely looking up from under his feathered Disp's cap.

"Hell, we knew that. The Grubbers have gone wild from seeing his ghost. Malcinder's hurrying this sacrifice through like a tornado. As quick as it's over, we're going out in full force to scour the island and kill on sight."

The Disp who had barked these orders now threw a rope to the rising boat, so that the returning searchers, as he thought, could draw themselves over to the balcony rail to disembark. With a sharp command for them to make all possible speed, he strode off.

Champlin watched him go with a feeling that was far stronger than relief. Now there were only six men on the balcony—the official six who manipulated the details of the hideous sacrifice. They were absorbed in their machines, paying no attention to the returning boat.

The two dead Disps slumped languidly against the rail, weltering in their own blood that filled the bottom of the boat. They had served their purpose and Champlin had no further need of them. His deception had gone the limit. The rest was up to him—and his guns.

And his corn knife!

For his amazed eyes beheld his familiar weapon leaning against the balcony wall. With it were other effects from Douzel's fireside. Sometime during Champlin's recent absence the Disps had discovered the Douzel camp.

CHAPTER IX

Fight to the Death

"ALL set?" a Summiteer called out with startling pointedness.

"All set!" one of the others answered. "Is the monster ready?"

"Ready!" came another voice. "What's on your periscope?"

"They're chanting," said the periscope man. He was enclosed in a booth, but his voice—all the voices, so it seemed — clattered back and forth through speaking tubes. Most of the talking was done by the man at the periscope, whose instrument evidently extended up into the wall of the Shrine to give him a view of the hillside.

"They're leading her to the feeder. On your toes now, men—"

"Put your hands up!" Wayne Champlin's voice thundered through the rocky dome.

His words scarcely registered. Summiteers weren't aware of threats. These men were too intent on their machines—

"She's at the feeder . . . She almost fainted . . . They're putting her in—"

"Get your hands up or I'll shoot you dead!"

Two heads bobbed up, then a third and a fourth. Still it was a moment before the situation drove home to them.

"What the hell? You Disps were ordered—"

"I'm no Disp! Listen to me or I'll blow you to bits!"

"Champlin!" No growl of the Purple Fury ever sounded a more spine-chilling note than this Summiteer's shocked cry. His hands flew up.

But the man next to him reached sharply for his gun—a reach that cost him his life. A bullet jumped through his eye. He plunged like a blind bull, rolled through the railing at the edge of the balcony. His scream fell with him and was swallowed up in a deep-throated splash a hundred feet below.

Four Summiteers lined up before Champlin, pale with shock. The fifth and final man stayed with the periscope by command. He was to keep his back turned, keep calling out the events from overhead. The instant he turned around he'd be shot.

"Now! No false moves. You on the end there, put on your automatic cage controls."

His eyes glanced angrily at the human grappling hook—two jaws of steel which picked human bodies from the net and then snapped shut to imprison their victims in a small cage for as long as the Summiteers desired.

The Summiteer, chalky pale, shook his head defiantly. There was no time to waste. Champlin shot him through the heart. He fell underfoot and Champlin kicked him out of the way. The remaining men, seeing the jig was up, were as docile and willing as slaves. They were frightened and performed badly, but they performed.

At Champlin's orders, the big steel jaws of the cage swung around toward the wall. It rammed toward a vertical copper gas pipe that crawled up the wall like an immense stove pipe. In a glance Champlin had seen that the power for the balcony's appliances was stored electricity, not gas. But this copper pipe was the gas conduit to the purple flames —flames that awaited Elsa's fall.

"The feeder is lifting," came the voice of the periscope man. "The chant has stopped . . . Any moment now—"

At that instant the powered steel arm struck. It crashed and clanked against the copper conduit. The pipe was broken through. The thick lower stalk bent aside and poured out bluish fumes like some gigantic exhaust pipe. The live gas streamed forth as if from a fireman's hose.

"She's about to slide—she's sliding—"

Pwoffff! The hated roar of the purple blaze from overhead suddenly snuffed out.

"Blackness!" the periscope man cried. "Something happened! The Shrine! *The Shrine is dead!*"

CHAMPLIN had ceased to hear. His eyes were on the waiting net. At that instant the figure of Elsa fell past his gaze. The net caught her and eased her safely down into the darkness.

"Keep reporting!" Champlin shouted at the periscope man, who stammeringly obeyed. The Disp was seeing things that stunned him and tied his tongue in knots. At first, when the blaze had choked off, he had seen only torches jerking up stiffly, all over the hillside. The entire assembly was frozen. It seemed too dazed to move—except for some of the Disps and Summiteers. They quickly broke out of their paralysis and raced for their prayer caves.

"You mean they're coming in here?" Champlin demanded.

For the first time the Summiteer at the periscope dared to turn around.

"Like a flood!" he answered.

Champlin didn't see the periscope man come out of his booth, for he was busy putting the finishing touches to the other three Summiteers. By swift manipulations he succeeded in locking them in the big cage.

Then he whirled to see the remaining Summiteer lunge toward him like a mad beast. Off guard with his gun, he crouched low. The plunging form spilled over him. They rolled into a savage dogfight. Bluish gas puffed over them like heat waves.

Footsteps clattered along the balcony floor. Summiteers and uniformed swordsmen were flooding in. The clatter turned into a thundering roar.

The shouting voices, if they echoed out to the hillside throngs, bore no resemblance to prayers to the Purple Fury. They were cursings and growlings of consternation that might have been calculated to disillusion the most faithful of worshipers.

"What the hell happened to the Fury?" Ivan Scorpledge's enraged voice boomed out of one of the private prayer caves. "Out of my way, dammit! What the devil—"

The uproar sounding out of the blackened hilltop was too much for the ruling classes. Shocked out of their superstitious reverence, they advanced on the hot, smoky Shrine leaving their torches behind. They crowded close, peered down for sacred glimpses of the mysterious inner world. A terrific upsurge of live gas assailed their nostrils.

A few of them glimpsed the rapidly filling balcony; some saw two dead Disps sprawling from the side of an inflated rubber boat; some saw a strange-looking steel cage with Summiteers tearing at the bars. From the most revealing angle they caught sight of the muscular figure of Wayne Champlin, fighting like mad.

The Summiteer who had grappled with him went down under a blow from the butt of his pistol. Champlin bounded up, pushed his long hair out of his eyes. His Disp's uniform was in shreds. The escaping gas poured out at him. Already the wild cry of "No fire! Hold your guns!" was cried through the dome. Champlin choked for breath.

He sprang back to the controls of the electric-powered cage, swung it around in a wide circular sweep, crushed the first two Disps who advanced on him with upraised swords. From the other side of the balcony they rushed. The cage swung back to cut them off. But one of them plunged through.

Champlin hurled his pistol and

missed. His hand snatched up the corn knife. Small chance it would have against the broadswords of the Disps!

"Let *me* have him! He's *my* dish!" The loud bellow came from Captain Scorpledge of the Disps, halfway across the balcony.

THE swordsman who hovered within reach of Champlin was momentarily disconcerted by the commanding voice of his superior. In that split second Champlin struck. His corn knife gashed halfway through the Disp's throat. The victim fell in a shower of blood. He spilled against the railing, and his sword flew from his hand.

"Look out for the girl!" The warning came from Clay Malcinder, and no one within hearing misinterpreted his cry. He was going to see her sacrifice through, one way or another. "Get her up from there!" Malcinder roared.

No one was close enough to the controls which regulated the net. For the moment the command was unheeded. Scorpledge's roar took precedence.

"I'll take him! I'll take him!"

The crowded balcony made way. Puffing and barking at the gas, murder blazing from his eyes, the burly captain of the Disps stormed toward the sweating, tattered young Champlin.

"When he gets you," the taunting voice of Clay Malcinder called from across the balcony, "you'll think you're in hell!"

It was an easy threat to make. Everyone knew that Scorpledge and his sword were invincible. The gas thickened in every rocky alcove and pocket and crevice in the upper half of the cavern. Onlookers began to crowd out through the prayer tunnels for air. And why not? Scorpledge had things under control.

But what might happen when sword and corn knife clashed? Would that accumulated gas respond to sparks?

A clang of steel put that uneasiness to rest. Scorpledge bore down on Champlin with his long flashing weapon. Three lightning strokes shot out. Champlin caught them on his blunt blade. He slipped in a fast one—low but fast. Scorpledge smeared a hand against his hip. The hand came up bloody.

"You damned upstart!" he roared. "I took your parents and let you go free. I should have known better than to let a rebel live!"

His sword clipped Champlin's knuckles. Champlin backed away gradually, staying close to the rail.

Scorpledge grinned evilly. He reveled in his advantage.

"Damn you, I'm *glad* I let you live! I'm going to enjoy stabbing your eyes out and chopping your lips into your mouth and—"

An unexpected cough cut the big man's speech short. He started to back away from the stream of gas. Wayne Champlin, holding his own breath, had led him into it deliberately.

That was Champlin's moment, and he threw himself into it with every ounce of his power. The corn knife dashed deep into Scorpledge's ribs. *Click!*

Champlin jerked back—but not with a whole knife. In his hand was the handle and a poor stump of a blade.

The hulking captain fell, bellowing with pain. His sword slipped from his hands. He clutched at the chunk of blade stuck fast in his ribs.

On the instant another Disp rushed in with sword upraised. The sword descended — through gas-filled space. Champlin, with the nimbleness and daring of a trapped squirrel, threw himself over the balcony railing.

Summiteers, Disps and numerous other Higher-ups whose curiosity had swept them into these sacred precincts,

saw that sensational jump. They saw Champlin's fingers extend, slip past the side of the net—*missing by inches!*—then catching hold, as it seemed, by the last threads!

The net, already low with the weight of Elsa, sprang lower from its elastic suspension, bounced upward again, dipped down. At the second dip, Champlin succeeded in ripping the mooring cords with the stub of a knife to which he had clung.

Forty feet or more down to the water they dropped, Champlin and Elsa, striking the surface of blackness with a resounding splash.

CHAPTER X

Dreams Come True

"THIS way!" Wayne Champlin breathed as they came bounding up.

"Coming!" A hint of a quick eager smile touched the girl's face. Death racing after her—and a smile! What a girl!

Spotlights were on them from overhead. Above the uproar of shouting, Clay Malcinder's voice piped crisp orders. Already a boat was being lowered. Malcinder and two others were aboard it. Once they got down to the water level, there should be no danger from the gas. Malcinder fingered his gun. The boat slipped down swiftly.

"Under!" Champlin gasped. The girl seized his foot and, linked together, they sped through the blackness beneath the surface. Up again, Champlin turned for a last possible glance at the balcony before rounding a barrier.

Straight back of them Malcinder's boat was being unhitched for action. But it was the sight one hundred feet higher up that froze Champlin's attention. On the edge of the balcony lay Ivan Scorpledge, apparently forgotten—*but not dead!* The blazing lights revealed his arm in motion, his hand taking aim with a gleaming pistol.

In the last minute of his vicious life, Scorpledge intended to beat Clay Malcinder to the prize!

"Under!"

Champlin's order was swallowed up. As if a burning meteor had plummeted straight down through the Shrine the great cavern suddenly went white with a terrific burst of fire. The explosion flared like an angry volcano. It roared with a thunderous ear-beating *boom-oommm - baloom - thud - thud - thud — Crack - crrrack! Splash!* The angry splashing opened up into a ripping, pounding roar that was like a tidal wave from the depths of an inferno.

Nobody heard Scorpledge's gunfire that touched the gas off. Nobody knew whether his bullet struck its mark or missed. Much less did anyone know what happened to Wayne Champlin and the girl, for they had swum out of sight.

All that anyone knew in that moment was that death had struck. There was no time to know more. Thoughts and lives and purposes were incinerated with hellish fire and crushed under a hail of stones. Down went the balcony, the machines, the dead Shrine. Down went the hilltop and all the people in it and on it. Down into the deadly inferno of falling earth and scorching flame!

Halfway down the hillside the Grubbers watched, aghast. They fled from the terrific heat, back toward their own level. Scores of Higher-ups who had not been close enough to be caught joined them in the flight to safety.

Then they stopped and watched, and the dim glow of scattered purple blazes lighted their horror-stricken countenances.

The explosion was over. The fires burned quietly. The terrified voices had stilled. The roar of waves and

winds from within the earth diminished.

Now most of the sounds came from the island's shoreline where, under a bright moon, the rush of water was to be seen flooding out of little caverns.

Before the dazzled eyes of the Grubbers, two moonlighted figures clambered up out of the slushing waters. They were half drowned, they were battered and bruised and half naked; but they were not ghosts. They had battled the floods and fought their way through Jake Douzel's narrow passage to freedom.

"Champ and the girl!"

Wayne Champlin and Elsa had escaped alive and whole.

THE glad tidings spread over the island like a battle-cry of victory. Champlin and Elsa were conducted to one of the Grubbers' shanties, where they lay down in utter exhaustion. Not until dawn did they rouse themselves to join the Grubbers in examining the ruins of the hilltop.

The weird night had passed, and with it the horrors of death, the fears and terrors of a downtrodden people. The Purple Fury had been exploded from a living monster to a dead myth!

"The hilltop!" Elsa gasped, her eyes incredulous. "What — where is it? What's happened?"

Against the white sky she and Champlin saw the new outline. The pointed cone was gone; instead there was a wide craterlike pit of stones. From within the irregular broken lips of the vast cave-in, soft purple flames glowed, and thin lines of smoke rose idly.

They joined the Grubbers further up the hillside. Most of the Summiteers' mansions were in ruin; the food storehouse was gutted. The headquarters of the Disps had also fallen.

Only one Summiteer did Elsa see who had escaped with his life—the elder Malcinder. And—Clay Malcinder's father was quite mad.

Like a personification of unshakable faith, the gaunt old hypocrite was now a shattered mystic. Like a dazed automaton he knelt at his place of worship, which had curiously escaped the cave-in. His mansion was gone, his Shrine was gone, the monster he prayed to was certainly dead; still he knelt on the white slab of stone and waited, waited for the familiar whisper he had always paid obeisance to when he was sane.

Elsa crowded close within Champlin's arm.

"I've been wondering, since we came out last night," she said apprehensively. "Is there any danger that Clay Malcinder might still be alive somewhere down under us? Is there any danger he might find his way out—"

Champlin shook his head. The arrogant scion of the Malcinders had been squarely beneath the center of the cave-in.

"He lies forever under his precious Shrine," said Champlin, and his white teeth gleamed in a smile that was good to see.

Something was going on at the edge of the ruins. Several Grubbers drew a form up to the surface by ropes. The form wriggled and turned out to be Shorty Joe Sanburn, very much alive. His comrades had let him down to pick up a trophy, something he had stolen out of the altar walls before the ceremony, and had lost in his retreat down the hillside.

"I found the demon!" Shorty Joe laughed. "I'll show him to you, Champ, if you'll promise not to use him on us when you get to be our leader—or hadn't you heard?"

Shorty Joe's prize proved to be a small but powerful stereopticon projector containing a single slide—an intricate painting of a demon with hungry

red lips and reaching hands.

"Here's what we saw on the screen of smoke," Shorty Joe grinned. "No wonder a knife went through him!"

Champlin's blue eyes were triumphant. But there was pain in them too, the memory of the frightful oppression now lifted from his people.

He said slowly, "It has been a horrible experience for us all. But it will never rise from its ashes to plague us again. For all time, this blight has been wiped from the earth."

Shorty Joe came forward then. He put his hand around his friend's shoulder and punched him playfully in the jaw. Champlin snapped out of his somber mood and punched back.

"Ouch!" Shorty Joe wailed. "Let up, will you? Do you think I'm a big bruiser like yourself?"

Everybody broke into laughter at that. And Shorty Joe, remembering he had a message to deliver, became suddenly serious.

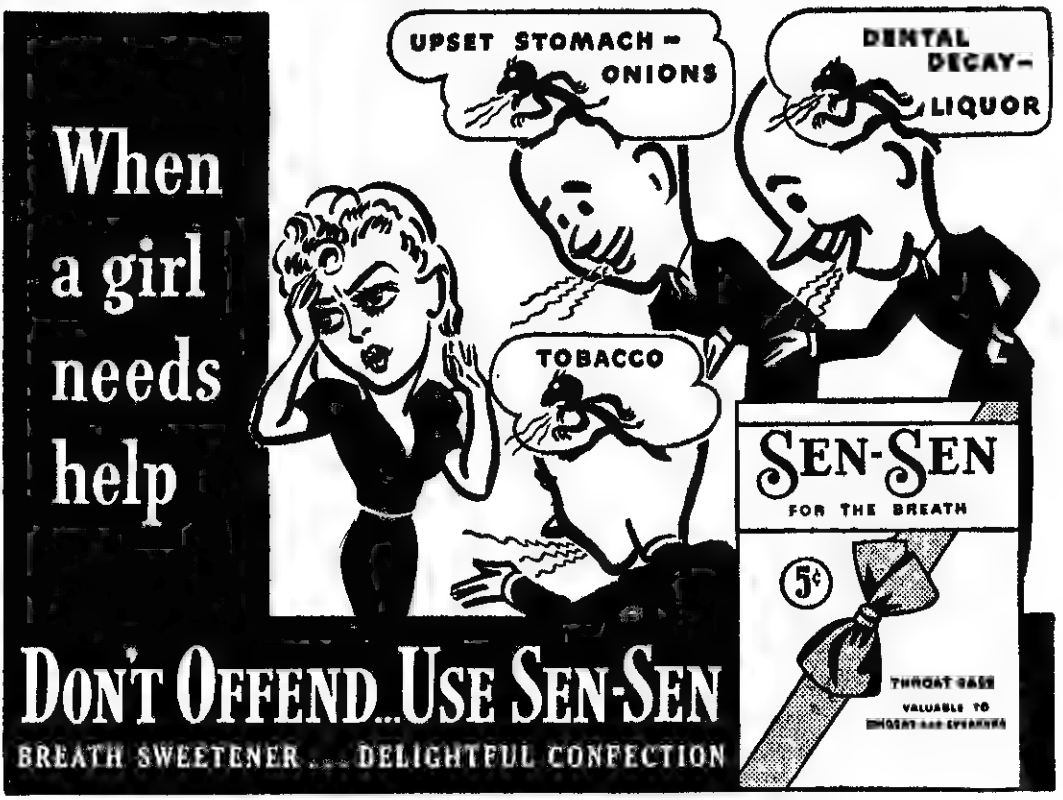
"The people want you to stay and lead them," he said earnestly. "Even the Higher-ups that escaped the fate are looking to a new life. You and Elsa could give us the guidance we need."

Champlin caught his breath sharply. "But Elsa—"

"Wants to stay," the girl broke in, placing her hand on her sweetheart's broad shoulder. She smiled at Champlin. Then the two of them looked up, to see that the Grubbers were standing anxiously close by, watching to learn what their decision would be.

For a dramatic moment tears filled Elsa's eyes as she gestured toward the patient faces about her—the faces that now glowed with the simple strength of Wayne Champlin's own vision.

"These," said Elsa softly, "are my people, too."



X-RAY MURDER

By MILTON KALETSKY

Horton swung the lever that controlled the X-ray projector until it pointed at Banks' back

The test of an efficient scientist and his success doesn't lie in genius, but in attention to exact detail and careful checking—even in plotting murder

HORTON arrived at the laboratory early. This was his day of triumph, he reflected, a twisted smile on his bony, emaciated face. Today he would remove the one obstacle between him and fame.

Though there was so little time, Horton dropped into a chair and sat glowering at the floor, brooding over the conversation he'd overheard yesterday. He'd been about to enter the director's office, when he heard his name mentioned. Stiffening rigidly, he'd listened.

"It's no use arguing, Banks," the director stated quietly but firmly. "Horton has become too hasty and careless in his work. I've had many complaints that he doesn't check what he does. He's been told again and again to go over everything twice, to find and correct his errors before they cause trouble, but he doesn't do it. We can't tolerate it."

Across Horton's lined face had swept a spasm of hate and rage. Why should he bother to do good work when others, such as Banks, got all the fame and glory, he thought angrily.

Then Banks' soft voice had pleaded, "But he'll be all right soon. It's just

that something's been worrying him. He's been absorbed in thoughts of his own, that's all."

At that, Horton had laughed noiselessly to himself. Sure, he'd been absorbed in his own thoughts, thinking up this simple, perfect way to get rid of Banks. The next instant, however, his twisted smile had vanished when he heard the director's definite and uncompromising reply.

"See here, Banks," the director had snapped. "You've been shielding Horton too long already. I know you and he are old friends, went to college together, and all that. But we can't be ruled by sentiment. You and Horton both started here as laboratory assistants. In six years you've become our best research worker. You're famous internationally, while Horton is still what he started, an unimportant assistant. Worse, he's damned inefficient lately. If he doesn't improve very soon, out he goes. That's final!"

But Leonard Horton, clenching his fists agitatedly outside the director's office door, had a different explanation of his failure. Banks had cheated him. Banks had failed to give him his proper share of credit in the steady stream of discoveries that bore Banks' name. That's why Leonard Horton was unknown. And that was also why Horton had been planning for months to kill Banks.

As the physicist rose to leave the director's office, Horton had rushed back to the laboratory, his mind a confusion of desperate thoughts. So they were going to fire him, were they? Then he had to act at once. Tomorrow morning he must put his plan into action. And it was a good time, too.

Banks was just completing his most important invention, which he'd been working on rather secretly for a year. With Banks dead, Horton could claim this new discovery as his own, and fame and glory would at last be his. The institute certainly wouldn't fire him then.

Suppose the other research workers doubted that the new invention was Horton's. Ha, he'd thought of that, too! As soon as he killed Banks, he'd destroy all Banks' notes and calculations, and would substitute a duplicate set of figures in his own handwriting. Then nobody could prove that the new discovery wasn't his own.

HORTON came to life again suddenly. These brooding recollections had taken five minutes of his valuable time.

"So I'm careless, am I? So I make mistakes in details, do I?" he muttered through writhing lips as he hastily set to work. "I'll show them how careful I can be!"

In the center of the laboratory, over a large table, stood the great glass bulb that was to make him famous—an X-ray tube of a new type. By designing the tube on new principles, and by using direct current of far higher voltages than anyone had dared use before, Banks had obtained a new kind of radiation, more powerful and penetrating than anything hitherto produced.

It was these rays that were the great discovery. For Banks had found that with these rays, he could disrupt and rebuild atoms and molecules at will! Transmutation on a large scale was at last possible, and the secret of creation was within man's grasp!

So powerful were these rays that a few minutes' exposure to them meant quick, horrible death. Under their searing influence, living tissue dissolved into formless dead matter. Therefore the tube's front half, from which the rays poured, was covered with a ten-inch lead sheath to stop and absorb the deadly radiation. One small hole was

left in the sheath, from which a slender beam of the rays was permitted to escape.

The back of the tube was uncovered, as no radiation escaped from that end.

His slender body quivering emotionally, Horton opened the lead sheath, its halves swinging on heavy hinges. Using an electrically heated needle, he cut out a block of lead from the inside of the sheath, near the small hole, then closed the sheath over the glass bulb again.

From outside, no difference could be seen, but part of the sheath was now only half an inch thick. Through that thin layer, the fatal rays would shower onto Banks as he bent over the table. And a few minutes later, only one person would know how to use the great tube, and only one person would get credit for it—Leonard Horton!

Quick steps sounded in the hall outside. Banks! In a panic of haste, Horton slipped the lead bar he'd cut from the sheath into his pocket, then leaped to the switchboard which covered one wall.

Snatching up two thick cables, he thrust them into the direct current outlets, one into the positive and one into the negative, connecting the tube to the electric power source, just as Banks entered.

"Oh, here already, Leonard?" the physicist greeted, a friendly smile on his handsome, studious face as he doffed his coat from his vigorous figure. Pretending to be busy, Horton mumbled an unintelligible reply.

Banks inspected the tube briefly, then prepared for work. Picking up a crystal, he mounted it in the hole in the sheath and turned on the power.

"Leonard," he said casually over his shoulder, "try to be more careful, won't you? Yesterday afternoon, I had to correct several things you did wrong."

Horton kept his head turned away so that the fury in his eyes could not be seen. Mistakes, eh? Not today!

BANKS continued warningly, "The director is peeved because you don't check what you do." He bent over the tube, frowning at the crystal.

Quivering visibly, Horton turned to watch him. The rays must be pouring through that thin part of the sheath over his enemy's entire torso. In a few minutes he must slump down, dying.

Then Horton would carry out the last step in his plan, his master stroke. Opening the sheath once more, he'd carefully melt in the piece he'd cut out, leaving no trace of what had been done.

Unable to control his anxiety, Horton approached the table and stood behind the tube, opposite Banks. The scientist was impatiently waiting for the rays to take effect on the crystal. When minutes passed and nothing occurred, he murmured,

"Queer, something's wrong. This crystal should glow in the radiation. Leonard, are you sure the tube is —"

He stopped, startled. "Hey, what's the matter?" he cried, staring at his assistant.

Across the table, Horton was gasping for breath and slowly crumpling to the floor. His face, his whole head was disintegrating and melting away.

Banks snapped a switch, shutting off the tube, and vaulted over the table. He was already too late. Horton lay twitching on the floor, then quieted as the disintegration spread downward along his body.

The physicist's shouts brought the director running from his office across the hall.

"Good Lord!" he gasped, taking in the situation at a glance. "How'd he get exposed to the rays?"

"What?" Banks cried.

"He looks just like the rabbit you tested the tube on," the director exclaimed. "Don't you remember?"

"Yes, yes!" Horror choked the physicist. Bewildered, he repeated the director's question, "But—but how'd he get rayed?"

The director stooped, observing a bar of lead protruding from the dead man's pocket. Gingerly he withdrew it.

"What could this be?" he asked, puzzled.

Biting his lips agitatedly, Banks quickly opened the sheath to examine the tube and stared in amazement at the large hole Horton had made. Then, suddenly understanding, he took the bar of lead from the director's hand and thrust it into the cut-out space. It fitted in exactly.

The two men regarded each other silently, both surmising what had been supposed to happen.

"So *I* might have been lying there like that now," Banks muttered, staring at the formless mass that had been a man a minute earlier. "I still don't see how the rays got him. He stood at the *back* of the tube."

He whirled to the switchboard and his jaw dropped.

"Look!"

THE director's eyes followed the pointing finger. The cable which should have been inserted in the positive outlet hung from the negative source; while the cable that belonged in the negative outlet dangled from the positive.

"Well, there it is," murmured the director, picking up a phone to call the police. "With the current reversed, the rays poured out the uncovered back part of the tube."

Banks drew in a long breath, stepped to the switchboard and pulled out the cables which Horton, in his haste, had reversed. Looking down at the dead man and shaking his head sorrowfully, he muttered,

"Even in something so important to *him*, he didn't bother to check his work."

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RIDDLES OF SCIENCE

Is There a Death Ray? . . . . .

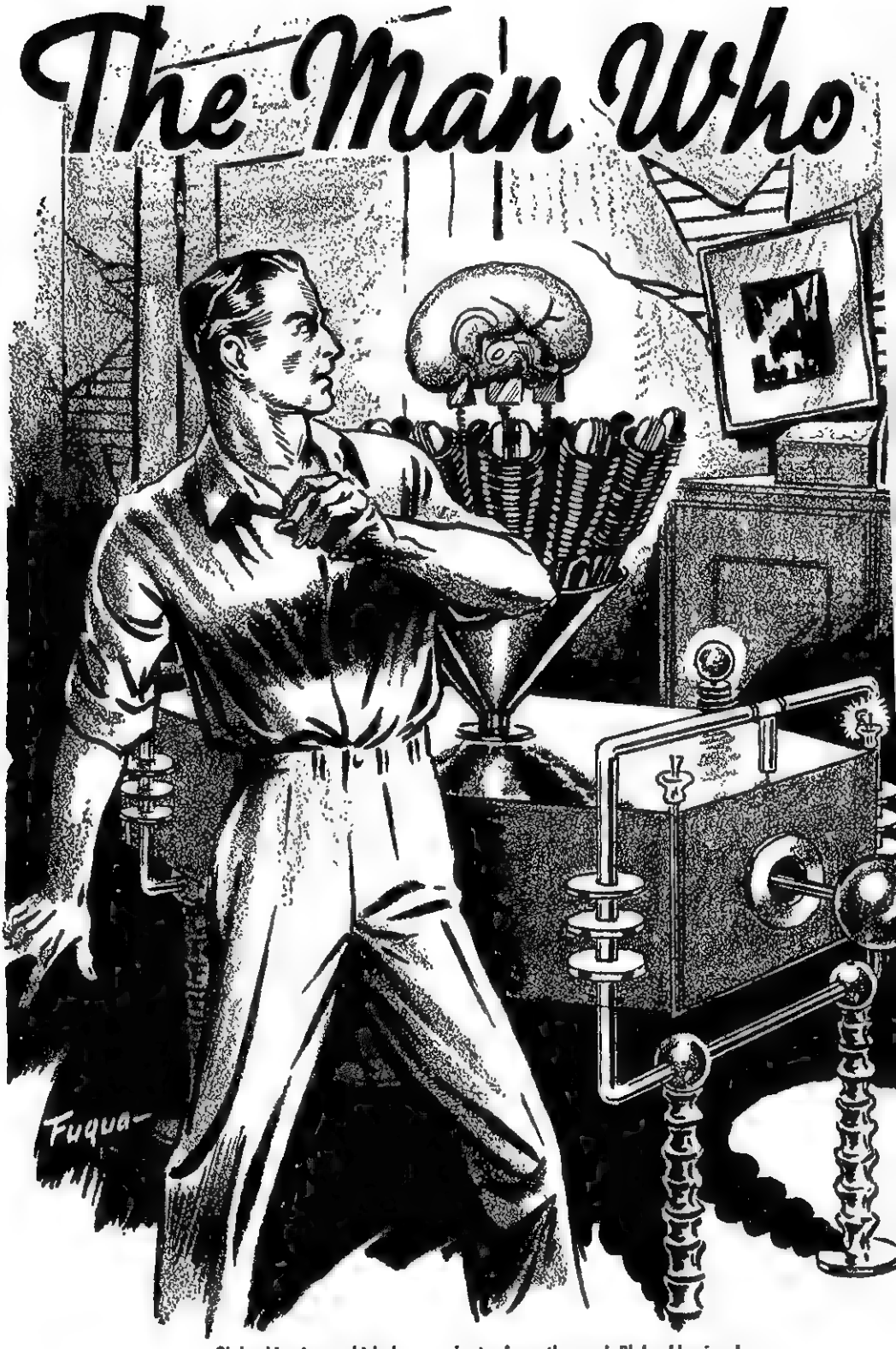
SCIENTISTS TODAY, OUTSIDE OF GERMANY, WONDER IF THE **DEATH RAY** HAS ACTUALLY BEEN DISCOVERED. IT IS CLAIMED TO HAVE BEEN USED IN CONQUERING THE KEY BELGIAN FORT, **EBEN EMAEL** . .

GERMAN **STUKAS**— **DIVE BOMBERS**—ARE SAID TO CARRY NEW WEAPONS EMPLOYING SOUND VIBRATIONS WHICH PRODUCE **PARALYSIS** . .

RECENT DEMONSTRATIONS AT THE UNIVERSITY OF CHICAGO CAMPUS OF AN UNDESCRIBED **RAY KILLED** A **GOAT** INSTANTLY AT A RANGE OF **30 YARDS** . . .

DOES a death ray already exist? As far as science is concerned, this may no longer be a riddle. It is true that recently a goat died on the campus of Chicago under the carefully shielded muzzle of a device that was not a gun. It is also true that Hitler has claimed to have a secret weapon, and that defenders of the Belgian key fort, Eben Emael, were overcome in a way even they do not understand. Thomas Edison was once purported to have turned over to the War Office a device so deadly as to be used only in America's direst peril. Has the death ray already been invented?

The Man Who



Blake Harrison whirled around—to face the real Blake Harrison!

Never Lived

by Ross Rocklynne

How could Blake Harrison remember a life he had never lived? Worse yet, how could he be two men, one of them under sentence of death for piracy?

BLAKE HARRISON, unshaved, clad in dirty flannels and open shirt, lounged at a corner table of the Red Café, the most ill-reputed saloon in Marsport, clutching a glass of Martian ale in his big hand.

His eyes, half closed from days of carousing, watched a chorus of dancers cavorting in the middle of the floor, and the bawdy space-hands who applauded their act.

Two men, clad in the uniform of the Martian port police, pushed their way through the cigarette smoke toward Blake Harrison. They stood over him, ominously. He looked up, startled.

"You, Blake Harrison!" one said curtly. "You're under arrest!"

Before Harrison could resist, a pair of steel handcuffs snapped over his wrists.

"Say, what is this?" Harrison raged, throwing himself to his feet and wrestling wildly with the cuffs.

The calm-faced officer pulled a Graydon flame pistol out from his waist.

"March!" he said. He laughed jeeringly. "So the famous, so-wily Blake Harrison allows himself to get caught

in a cheap dive! I could have thought better of you. I didn't think you were common scum!"

Harrison took one look at the pistol, another one at the evil laughing faces of the space-hands who had gathered around in an interested circle.

His hands fell limply in front of him. His jaw, which had seemed slackened by drink before, now suddenly hardened, and grim sparks shot out of his eyes.

"I don't get it," he said, in a flat, steely voice, meeting the eyes of the officer burningly. "But I'll march—and so will you, stuffed shirt, right out of your stripes, when my family back on Earth hears about this!"

The officer laughed gently, in great humor.

"Family! Everyone knows Blake Harrison's family died five years after he was born, in a space-wreck, and that he was rescued by pirates; which accounts for his arrest now, in case he doesn't know it!" His voice turned ugly. "C'mon, you—*move!*"

Blake Harrison moved, without another word. His sudden rage had turned into a curious, tight-lipped wonder. He truly didn't know what this was all about. What did these officers mean by saying that his family had died in a space-wreck; that he himself had been rescued by pirates?

No such thing! Something was very wrong, somewhere! But, knowing the port police of Marsport, the domed city which harbored all incoming liners on the planet Mars, the best, by *far* the best thing, was not to raise any rumpus!

AT the other end of the domed city, Blake Harrison faced a granite-featured chief of police, who tapped gently on his broad-topped desk as he studied his prisoner.

"You admit you're Blake Harrison," he said tonelessly, "but refuse to admit that you're the *pirate* Blake Harrison?"

"You're damned right I refuse to admit it," Harrison snarled. "You tin-horn police think you can go around arresting people just because their names happen to be the same! I'm telling you, the minute the cuffs fall away, there's going to be a hell of a lot of tin badges falling on the floor as you guys resign!

"I'll say I'm Blake Harrison—of the steel mill Harrisons! I hope," he said ominously, "that means something to you!"

He grinned triumphantly.

The granite-faced man smiled thinly, and glanced significantly at the two officers who had brought Harrison in. Then he motioned to his secretary, sitting with pencil poised over her shorthand notebook.

"Get me the *dossier* on Blake Harrison, and call in the identity expert with the mouth plates of Blake Harrison."

The secretary handed him the *dossier* after a few minutes, then spoke into a phone across the room.

The chief of police of Marsport flicked open the *dossier*.

"Blake Harrison," he read. "Age 28, orphaned at the age of five, sheltered by a band of pirates on Asteroid X until he was 21, when he took over the leadership with a series of killings. Since then, with his band has raided merchant vessels, kidnaped passengers from passenger ships, sacked unprotected villages on the frontier planets, killing, robbing, torturing as he went."

The chief ran his eyes down a list that evidently consisted of Blake Harrison's crimes. He finished up:

"Description. Six feet, black eyes, black hair, black beard; addicted to brown colors in clothing; smokes cigarettes or pipe; root stain on lower right eyetooth; full lips; tanned."

He went on with other items, then raised calm, quizzical eyes at the prisoner.

"That fits Blake Harrison the pirate, and it fits Blake Harrison, the so-called steel millions' son."

Harrison stared at him with popping eyes. He felt as if his reason was tottering. A cloud was rushing up through his brain.

He took one step forward, his lips working.

"But I don't get it," he whispered, half extending his hands. "I know that description fits me, but I swear I'm—"

The chief suddenly leaned forward, his eyes abruptly hard and frosty.

"*Shut up!*" he clipped out. "Damn you and your silly act! We've got you! Take it like a man. Oh—come in, Bert."

The identity expert came in. The chief of police motioned to him. The identity expert went up to Blake Harrison and, much as one would a horse, to inspect its age, he pried open Harrison's mouth skilfully, inserted a plate filled with a thick, gummy substance against the roof of that mouth, holding it there firmly. Then he eased it out carefully.

"It's him," the expert said disinterestedly as he started for the door. "Them mouth plates don't lie. There aren't two men in the world with the same roof of the mouth."

BLAKE HARRISON stared after him agape, his head whirling. A frightful feeling of madness was creeping in on him. In spite of himself, he began to shake.

He went up to the desk and brought his cuffed hands down once, with a thump.

"It's a frame-up," he whispered. "I swear it is! I've been on Mars for two weeks. I came in on the *S.S. Lakington*. You can check the passenger lists. Before that, I lived in Akron, Ohio. Before that, I went to Yale. I played football in the class of '80. I—"

He stopped as he saw the chief speak into the telephone.

"Lakesley? Look on the passenger list for *S.S. Lakington*, incoming. Blake Harrison listed there? Hell, no? You'd have noticed it— Sure—sure— No, we've got him here—he's cooking up a wild story— Thanks—thanks. Right—a load off our minds."

The chief hung up and leaned forward, his eyes steely.

He said ruminatively, "It's been a long time that we've been trying to get you, Harrison. At last we've succeeded. And by God, there won't be a woman or child who won't cry for joy when they hear about it. Two months from now, when you finally get back to Earth and trial, you'll find out what people think about you!"

He made a motion. "Put him in a cell—deportation in two weeks!"

And Blake Harrison was hauled away, his face dull, his eyes haunted with the fear of his own madness. He had *never heard* of Blake Harrison, the pirate! And if all the women and children on Earth had, why hadn't he? *Why hadn't he?*

HARRISON was in his cell two days before he decided on his escape. He had never thought of himself as a particularly daring person, but now he felt he would do anything rather than stay here for another twelve days, going mad with his thoughts.

He had begged and pleaded for the guard to send a message to the warden to come and see him, to allow him to explain. The guard hadn't replied. Now he was beginning to suspect that he must be the victim of a gigantic, in-

credible frame-up! He *couldn't* be Blake Harrison, the pirate! Or—the very thought sent shivers up his spine and sent him shuddering toward madness—*was he?*

All that burden of proof! The mouth plate. The *dossier*. Even down to the color he preferred in his clothing! No one could doubt that the chief of police *knew* he was a pirate they had been searching for.

Once he had called across to one of the nondescript occupants of a cell opposite him, asking about Harrison, the pirate—if there was such a person.

The man burst into a loud guffaw. "Sure, buddy," he roared. "You're *him!* The dirtiest, orneriest stinker that ever lived, you rat! Congratulations to the world that they caught you! At least, *I* never went around murdering people in bed!" He spat and turned away.

Blake Harrison recoiled from that indictment, an indictment of him for something dreadful that was going on that he couldn't name! Whatever it was, some fiendish plot had taken place. The police were certain this was the feared pirate. Even his cellmates were! So Harrison decided he couldn't stay here any longer. If he did, he'd go mad—and think he *was* the pirate, too.

HIS cell had one window, at shoulder height. During the day, the air-conditioning apparatus that Marsport boasted blew the air out the window. At night, for three hours, the air blew strongly through the window, circulating through the jail, which was a plain affair, after all, not particularly designed to hold escaping prisoners. If they did escape, they'd never be able to leave the doomed city of Marsport anyway.

Harrison studied his chances. He could look through the window with the thick bars lacing it, and see the lights of the city now. This was the rear of the jail, flanked first by a strip of land that had once started out to be a garden, but was now a weed-grown wilderness; and flanked beyond that by a noisome alley that led into main avenues.

But Blake Harrison was not interested in the alley. He was more interested in the masses of poison ivy vines on the side of the building.

In the darkness of his cell, every time the guard passed, he hoisted himself up to the broad window sill, scraped great quantities of the vines off the sides of the building, until he had made a great patch. He pulled them in, stuffed them under his bunk, a huge mess of them.

Constantly, he let himself down again as the guard came past, and then hoisted himself up again to draw in more. Finally he couldn't get any more of the vines. He called it a day, and went to bed, though troubled with fear that his plan was too slim, too fantastic to allow him success.

Harrison kept the vines hidden during the next two days by dropping the counterpane over the bed and almost to the floor. At the end of those two days, the vines had dried out sufficiently to burn, though they were just green enough to cause great quantities of smoke.

And when that smoke, from the burning of a vine that had been carelessly transplanted from Earth to Mars, began to circulate through the jail—yes, even through the outer rooms, through the ventilating system, under the impulse of the Marsport night breeze—hell should pop—and there would be a lot of uncomfortable people within the space of a few minutes.

For this was *Martian poison ivy!*

"One thing in the world that is harder

than anything else *not* to do," Harrison told himself fervently. *"To scratch!* And there's going to be a lot of scratching people!"

Harrison's plans after he should escape seemed hopeless. But escape he must, if only to show his resentment at the way he was being treated. Too, there was a feeling deep in his mind that once he was free in Marsport, he could elude the police for a time long enough to enable him to establish his true identity.

He didn't let himself think what would happen if even his radiograms to his mother and father didn't bring strong denials that he was any such thing as a pirate. What if, indeed, his radiograms were returned to the Marsport station because *no such persons as his mother and father existed?*

He stopped himself there, and devoted himself stubbornly to his desperate plan. He would go mad if he thought any more along those lines.

The jail quieted down as the sun ceased to send its red infiltration of light through the curving dome of the great Martian city. The faint city lights came on.

KEEPING his nerves from quaking the way they seemed likely to at any moment, Blake Harrison accepted his last cigarette of the day from the guard, held it to his mouth while the guard lighted it and then walked on.

He took one deeply appreciated puff on the cigarette, and then husbanded the slow glow jealously. He had to keep that glow until the strong night breeze began. Even if he had to transfer that glow to something else and risk detection.

"Now!" he said to himself. The breeze started coming fitfully through the window, and then more steadily as the huge fans below the city settled down to their job. The wind became strong, sighing through the cell, through the jail, through the warden's office, the guard room, through the outer reception hall where prisoners were registered before being taken in for a looking-over.

Feverishly, Harrison dragged his vines out from under the bed, placed them in the middle of the floor, as the guard passed on his slow up and down journey.

He plucked a dead leaf from the vines, powdered it in his hand, took others, and made a little pile.

Quaking, he leaned far down, blew sparks from the cigarette onto the pile of tinder. The tinder smoldered. Under his coaxing, anxious breath, it suddenly leaped into flame! With a hissing of released breath, Blake Harrison shoved it under the heap, watched other dead leaves take hold, soon saw flame leaping through the whole base of the pile. A preliminary cloud of smoke billowed away—through the cell door.

"Good old poison ivy!" Blake Harrison whispered lovingly. "Ten times as virulent now as the kind they accidentally imported from Earth a century ago!"

Oddly enough, the idea occurred to him only fleetingly that he himself was subject to this ivy; in fact, more susceptible because he was directly in its path. But something in the dim recesses of his mind told him that somehow, he would be immune.

More smoke rose, billowed away, the clouds growing in volume as the half-green stuff swiftly smoldered.

In a few minutes, a veritable river of acrid smoke was pouring out from the cell, billowing away in great clouds up the corridor, streaming through ventilator gratings.

The guard was bound to come any minute now. Harrison waited, tensed.

Soon came the pounding of big feet. Blake Harrison heard the guard choking. But he got to the cell door, peering in through blinking, wet eyes.

"What's going on in there?" he roared. Receiving no answer from Harrison he burst into a stream of choking curses. Keys rattled, a lock turned. The door swung open.

Still choking, the guard entered. Harrison, hidden partly by the smoke, leaped. It was all over in a moment. The guard barely offered the resistance of a startled, upflung arm before Harrison bore him hard to the flooring, to strike his head hard against the cement. The guard moaned and was still. Harrison still made no move to escape. The guard's clothing would not fit him even if he wanted to try that method.

He waited, crouched.

The other prisoners were now waking up, and calling back and forth to each other. Suddenly they realized the smoke was coming from Harrison's cell, and were generously silent, realizing that some strange plan of escape was being consummated.

TEN minutes passed. Still the vines continued to smolder, though the great volume of smoke was dying down now. Blake Harrison chuckled exultantly. The smoke had been discovered in the outer rooms, but they wouldn't know where it was coming from. They must have been choking so much too, that there had been confusion; *and* scratching!

When the poison ivy smoke showed signs of decreasing toward a minimum, Harrison decided he had better get out of there.

He left his cell, ran swiftly down the corridor toward a turn in the hallway that gave way into the guard room.

He came into the brilliantly lighted guard room, partly clouded by the smoke. A guard, holding his handkerchief over his mouth with one hand, and scratching madly at his legs with the other, rushed in, evidently bound for the cells, and saw him. His eyes bulged.

Plainly, in that split second that counted so much, the man was divided between an insane desire to scratch and a need to jerk out his pistol. He took one last agonizing scratch —and by that time, Blake Harrison was on him, had knocked him down, had struck him; and then was on his way.

He made the warden's clouded office, saw it was empty. He went on to the outer hall. Here he saw the warden, and three guards, all using both hands trying to scratch their entire bodies at the same time.

The warden saw Harrison, took one look, scratched agonizingly and then yelled at the guards,

"Get him! That's Harrison!"

One of the guards panted, "I can't! The *hell* with it! I *itch!*"

Blake Harrison went through, his one hundred and eighty pounds bowling them over. Without another soul to stop him, he hurled open the tall double doors, bounded the granite stairs three at a time, and was in the street. In another five seconds, he had rounded a corner, and was panting at the cruising driver of a two-wheeled, gyroscopic-balanced, atom-powered taxi,

"Paddock Hotel, corner of Madison and Sunset! Quick!"

The driver burned up the streets, in ten minutes had let Harrison out.

"Wait here," said Harrison. He dashed away. He didn't have any money with him, but knew he had some in his room.

He stopped at the registration desk, holding out one imperative hand.

"Let me have my key!" he said.

The supercilious clerk looked his unkempt figure up and down distastefully.

"Name?"

Blake Harrison knew a moment of shock as he realized that he had registered here under another name. *Why?* He gave the name, Ray Lanning; and received a shock that sent him rocking back on his heels.

The clerk ran his eyes down the list of names. He looked up with a scowl.

"There's no Ray Lanning registered here," he snapped. He made a motion with his thumb. "Get out, bum, before I sic the house man on you! *Move!*"

LIGHTS flickered in front of Harrison's eyes. With a savage motion, he turned the registration book around, reading wildly. He couldn't find his name, even though he remembered signing two weeks before!

The clerk suddenly made a motion to a man with a low-brimmed hat. The man with the low-brimmed hat started across the room toward Blake Harrison. Harrison caught sight of him out of the corner of his burning eyes. He turned quickly, ran across the soft-carpeted lounge, past the elevators. He flung open a door, and found himself in an alleyway.

He ran up the alley, turned down another one, and up another, until he felt sure no one had followed him. Then he huddled against a dark wall, and buried his burning face in his hands, little uncontrollable sobs coming from his stomach.

Who was he?

He *knew* that he had come in on the S.S. *Lakington,* from Earth, two weeks before. He *knew* he had registered at the Paddock Hotel, at the same time. He *knew* that before that he had lived his whole life on Earth. He could recount his whole history there.

Yet—*the mouth plates had proved beyond a shadow of a doubt that he was Blake Harrison, a pirate the whole solar system feared!*

Finally he raised his head, staring unseeingly toward the main avenue where milled the night traffic of Marsport, automobiles with two wheels, pedestrians leaving shows or cafés.

What was he to do now? If he was caught by the police again, he'd never escape conviction as a notorious pirate.

His mind began to work with thoughts he had dared not contemplate before. All these events had begun in the café where he had been arrested. As far as actual facts seemed to go now, *he must have been born shortly before those events took place!*

He took a deep breath, and moved on shuddering legs down poorly lit alleys, making his way back toward that café. Somehow, he must find the solution there.

The café was in the down-at-heel section of the town, where the air circulated more poorly than in other parts, because here was where the Martian dome came down to meet the ground. He hovered across the street, listening to the bawdy music, the roars of men, watching painted women and drunken men entering or leaving.

Suddenly, Harrison saw something that sent the breath soughing from his lungs. From a pair of basement steps a few doors removed from the café, a man with a hat pulled low over his eyes emerged. There was something about that figure that was monstrously familiar.

And not only that, the man was dressed in a shabby suit of *brown!*

Blake Harrison's hands crept up to his cheeks. His very skin was shuddering under the horror that was entering his mind.

For that man, who now moved down

the street, head bent low, was—could be—*none other than himself!*

Blake Harrison almost collapsed onto the rude cobblestones as the certainty of that came to him. The two of them were undeniably—*identical!*

But how? *How?*

HARRISON wasted no more time in mad thoughts. He impelled himself across the street, fighting down his dizziness. He had one moment of sanity before he descended the basement stairs. He stooped in the street, and with his heel chipped off a corner of the curb. It was made of a substance that would serve the purpose of chalk admirably.

On the smooth red wall above the stairs he wrote four words, scrawling them boldly. He checked them over, feeling an impulse to laugh but unable to do so. Let any policeman read those words and he'd come running. But nobody else would pay any attention to them at all.

At the bottom of the cement stairs, he opened the door without hesitation, closed it quickly behind him.

The room was dark, except for an infiltration of light from a clouded window. As his eyes focused, he saw a rude bed, a washstand, a table, chairs, nothing else—except a door.

On cat feet, he approached that door, listening, fighting down his quick, hoarse breath. He put his hand to the knob, opened the door. The room was empty of life, though the light was on. It was a startling contrast to the first room, for strangely constructed machinery—weird and unearthly even to Harrison's unmechanical mind—practically filled the room.

He stood like a statue. A flash of memory, that passed as quickly as it came, sent a wave of goose flesh to his skin. He had, in the split second before it eluded him, remembered being in this room before. How long before? He had no thought in his mind that would tell him. He searched frantically. He found one scrap of information that peculiarly revolted him, one sudden memory.

The first thing that had ever happened to him had happened in this room! So the ephemeral thought told him.

"Crazy!" Harrison gasped. "Crazy!" The cold, thick sweat was running down his face.

He closed the door behind him, running his eyes around the machinery: a coffin-like contrivance, with ball electrodes projecting from either end; a large funnel with a spray of peculiarly wound coils sprouting from it; a pedestal holding on knife edges something that looked like a replica of a human brain, only it had none of the ridges.

What revolting thing had happened to Blake Harrison in this room, so revolting and horrible that his mind would not let him recall it?

His brain tottering, his nerves strained to the breaking point, he suddenly turned with a moan and flung open the door, pulling it tight after him. He held on to the knob as if afraid something were in there that would get him.

Then, realizing he was being irrational, he sank panting to a chair, burying his face in his hands, his thoughts whirling madly in his head . . .

He heard a click. Something of the tenseness of his nerves must have made him supernormal in his muscular reactions. He sprang to his feet with a snarl and hurled himself toward the man who stood in the door, mouth agape.

The man recoiled.

"You!" he screamed, as he saw Blake Harrison charging toward him.

The packages he was carrying dropped with a clatter. He flung up his arms, warded off Harrison's first furious, murderous blow. Harrison was flung to one side and spun hard against the wall, his breath soughing from his lungs.

HE saw the other man—a man the exact duplicate of *himself*—coming toward him, lips curled back from even white teeth, black, evil eyes blazing with a satanic impulse. Something hit Harrison crushingly. He raised both arms, kicked with one foot, caught his opponent on the chest. The man staggered backward, crashed into the table. The table tottered, then the satanic eyes were coming at Harrison again. This time Harrison could meet him with the full power of his fists.

He plowed in, his mind working with a hate that was purely animal, could not even be accounted for.

He caught a blow on the side of the head, retaliated with a fist that rose up from his hips at express train speed. In the last split second, that murdering blow was deflected.

A huge fist started toward his own head.

"I'll kill you!" the man with the satanic eyes whispered. "Yes, I will! *I created you—now I'll kill you!*"

It was as if all the lights had been turned out. Blackness engulfed Blake Harrison's brain in a great enveloping cloud. He tottered, reeled, then seemed to float down for an interminable length of time. Then, light as a feather, he seemed to strike the floor. Just as slowly, he drifted off to a sleep that was profound in its sheer lack of consciousness . . .

Thoughts again began to stir in his sluggish mind, began to react on his muscles.

His eyes opened; a moan, feeble and faraway, was ejected from his parted, bleeding lips.

He was still in the same room, staring through the shadowy darkness of it at a man—at *himself!*—a man who sat on the other side of the room, leaning slightly forward, a Graydon flame pistol balanced on his knee. Harrison himself was bound to a chair.

Their eyes, alike in every way save for the sheer evil that burned in the other's, locked.

"You fool!" the other Blake Harrison whispered, his nostrils flaring. "How did you break jail?"

Harrison's lips moved as if he were in a trance.

"It doesn't matter," he muttered throatily, his eyes staring with a horrible fascination at his double. *"I want to know about myself!"*

"About *you!* Know this, then. In a few minutes, you die. And it will not matter, because according to all the natural laws, *you never lived!*"

"I don't care about that," Harrison whispered, still throatily. "If I'm what I think I am, I won't want to live . . . But I can't be what I think I am," he cried suddenly, agonized. "I've got friends at home, a mother, a father, a brother; I've got a childhood, a boyhood, a manhood that I remember, down to small details!

"But," he protested, seeming to shrink within himself, "you did all that, too! You did everything. You made me. You—"

THE other Blake Harrison smiled sadistically.

"I have," he said through barely moving lips, "a peculiar loathing against letting myself—*you*—die without telling you some small part of what really happened. Could you listen without going mad?"

"Yes," Harrison said dully.

"I am the pirate, Blake Harrison, and all the things you've heard about me are true." The double smiled again. "I came to Marsport, believing that I had established in the minds of the interplanetary police the belief that I was on Earth. That they would think to suspect my being in Marsport seemed out of the question.

"Someone recognized me in spite of my disguise. Within a day, I found it a risk to go on the streets, and I knew it would be impossible to leave Marsport. Every man would be inspected thoroughly, to make sure he was not Blake Harrison. No chance—except one."

Blake Harrison nodded limply. "To stop the police from looking for you, by having yourself apprehended. So—you fashioned me in your own likeness, and I took the rap."

The other Blake Harrison nodded.

"I am a scientist," he said offhandedly, with a certain smugness. "If I hadn't been, I couldn't have kept away from the law for this long. For a month, I brought in the supplies to make a system of machines which I had started on several years ago, but not quite completed.

"Finding it necessary to escape, necessity became the mother of invention. I completed my apparatus—doubtless you saw it," he said with a sneer. "Well, it's nothing if not complex. I could go into a lot of detail, probably, and tell you how to build one yourself—but why?

"In a few minutes you'll be as much without life as the basic electrons you were created from." He laughed gently, evilly. "Still, I can say this much—a stencil duplicates with the proper use of instruments and inks.

"A human being can be a stencil himself, and can be duplicated with the proper use of forces. I 'stenciled' you, electron by electron, molecule by molecule."*

He leaned forward, his eyes glinting with sardonic amusement.

"That coffin-like machine in there was your birthplace, and I was the stencil. With one exception, you were born with a fully developed body. The exception is that you were born with a virgin brain—with a baby's brain. And with the proper use of forces, I stenciled your whole life, your whole list of past experiences, down to the smallest detail, on your brain.

"Your name was Blake Harrison. You were the rich son of a steel mill king. Your father was big, bluff, a stern business man. Your mother was a sweet, wonderful woman whom you worshiped. Your grades in school were fair. Your life was the normal life of a rich man's son.

"You left Harvard with honors. You came to Mars, slightly wearied by the long trip. You decided to go on a bender, see what Martian night life was like. You were drinking Martian ale by the gallon—" He paused to let his cruel words sink in.

Blake Harrison was running with the sweat of agony, of revolt for himself.

"Don't," he said, shuddering. "You might tell me one more thing, though—and then go ahead and kill me! I don't want to live anyway. I'm not human. I couldn't stand it. Why did you go to all the trouble—and it must have been trouble—to keep *yourself* out of my brain?"

---

*It is well known that atoms are grouped in very definite patterns, and that the electrons and protons of an atom are quite different in construction, with each element. Also that molecules are made up of atoms grouped in certain ways, which make up certain compounds. Therefore, our bodies are a maze of complicated pattern-structures, which could be theoretically duplicated and copied, were a means of such duplication mechanically and chemically devised.—Ed.

"FOOL!" the pirate sneered. "Then there would have been two Blake Harrisons who had to get out of Marsport."

"But you could have let one get captured, offering freedom to the other."

"Great God!" the pirate breathed. "I gave you less brain-power than I thought! If one Blake Harrison escaped, it would simply mean that another would go to prison for life. And that one would be—me! It would be *me* even if it was the man that I created . . .

"Let that be the end of it!" he suddenly snapped, tossing his head. "This plan failed. Why I explained to you I don't know—I waste time. Another Blake Harrison must be created, identical enough with yourself so that the police think they have recaptured you. But *that* Blake Harrison will not know what you know."

The pirate rose with a snaky motion, stood over the bound man. He raised the Graydon pistol slowly.

Blake Harrison watched him dully, hopelessly. He was bitter now, bitter as no one man had ever been. It seemed incredible. He could recall his mother's face, her every characteristic with a clarity that was real, that made her real. Surely, she, and all the things he *remembered* happening to him, really existed. He groaned, tossing his head as a fever came to his mind.

He watched the real Blake Harrison's finger tightening on the trigger. Slowly—too slowly.

"Shoot!" he croaked. "For God's sake—shoot!"

The pirate's eyes were satanic as he slowly pulled in the trigger that would send a hot tube of intense flame burning through his captive's heart. He was taking his time, for his cruelty was no legend in the minds of men, but fact. Another second—and total oblivion!

The innocent Blake Harrison closed his eyes, glad, glad that nothing could save him now. But his eyes snapped open again, looked instinctively through the room's window. He saw a face, the face of a man garbed in the uniform of the port police. The fact abruptly disappeared. Harrison felt a cold wave of fear.

He yelled, "Shoot, you fool! Before it's too late!"

But it *was* too late. The door burst open, and two of the port police stood there, befuddled for an instant, and then alive with terrifying action. Harrison groaned abjectly, shuddering.

Blake Harrison, the pirate, spun with a wild curse, hurling himself backward, even as he fired blinding flame. His first charge was wide. He had no time for a second, for the arm that held the flame pistol was literally burnt off at the shoulder by the men in the doorway.

Blake Harrison, the innocent, saw that, sobbed at the irony of the fate that had robbed him of the death he wanted. Then he fainted dead away, as the police officers came charging into the room to take their screaming prisoner.

BLAKE HARRISON—the unreal—could not even bring himself to grin as he stood before a bandaged and painfully itching chief of police. Harrison's lips were turned down, and his eyes were sullen, lethargic.

THE chief, surreptitiously rubbing his thigh, grinned crookedly.

"Well, Harrison, we've heard the other Harrison's story—so that let's you out. You're a free man, and we've got the real criminal. And you've got yourself to thank for it. You know—the four words you wrote on the wall above Harrison's place.

"*Poison ivy—ha, ha!* Any cop who saw that, and who had heard about the

episode in the jail, would have been attracted by that tip-off. Now nobody else but you could have known about it—we'd hardly tell anybody else about it, would we?" he said wryly, still scratching persistently.

"I've got myself to *blame* for it," Blake said suddenly. "I wanted to die. Do you think I can go on living, knowing what I am?" he added with a burst of bitterness.

The chief walked around his desk, looking concerned. He grasped Harrison's arm.

"Yes, what are you?" he said softly. "I said you were a *free man.* How that pirate Harrison ever did it, I don't know, and he'll never tell us. But he supplied *you* with all the experiences, all the education, all the background, all the memories of a normal person.

"True, your mother and father and brother and all your friends are dead—to you—but it should help your grief to know they never existed at all. I'm an orphan, but I don't think I'm a monster."

He scratched uneasily. He looked then straight into Blake Harrison's eyes, smiling.

"Do you see what I mean, boy?"

A startled light was dawning on the youngster's face.

"I think I do," he breathed. His breath came fast. "Even though I was created—all human beings are created. When they reach my age, they have the same average memories—it's no different."

His chest swelled, and the corners of his mouth drew up. The chief smiled in satisfaction.

"Good boy."

He walked behind his desk again.

"One more thing." The chief smiled broadly and held out a slip of paper.

Harrison took it.

"A check," he gasped. "A—a hundred thousand dollars?"

"Right. Blake Harrison had a price on his head. That should be enough to give you a start in life." He grinned and then sobered. Absently he scratched.

"That poison ivy," the chief rumbled. "It was a good idea—but smoke?" He looked incredulous.

"Sure," Blake Harrison smiled. "The other Harrison included that in my education. Burning poison ivy carries the poison in its smoke. It affects the skin in just the same way."

"But this worked *fast!*" the chief objected.

"Why not? Martian poison ivy is ten times as virulent as that on Earth, because the conditions are more hostile. Well—" he paused—"I guess that about winds it up."

"But you? Why didn't you get it?" the chief demanded. "You handled the weed itself, you were in the smoke."

"Because," said Harrison, his eyes twinkling, "I happen to be immune. I'm—synthetic."

The chief nodded forlornly. "Yeah, I figured as much, you lucky dog!" He wriggled vigorously on his swivel chair, flushing embarrassedly when he saw Blake Harrison watching him with the makings of a grin.

PRESENTLY, "What are your plans now?"

Blake Harrison met his eyes steadily, a confident, happy light growing in his own.

"Back to Earth," he said softly. "Back to the planet I know as well as if I'd actually spent the greater part of my life there. I may be machine-made, but I'm a member of the human race, and I can catch experiences with the best of 'em!"

☆ ☆ ☆

The Observatory by the Editor

(Concluded from page 5)

YES sir, we can blame the whole thing on sun spots. Probably one of the strangest and most amazing theories ever advanced by scientists and economists is the sun spot theory of productivity. This theory proposes the fact that sun spots are the cause of most of our troubles, including our wars and our depressions.

According to the latest accusations of the scientists who are continually trying to explain why mankind is so ornery, sun spots cause a variation in the health and vigor-giving ultra violet radiations that strike the earth. During a period of too many sun spots, people lose energy and go about with disagreeable dispositions. Nations as a whole experience poor health and inferior productivity.

Experts point to the year 1934 as an example. The whole world experienced a drought and far reaching depressions shook every nation. It is claimed that wars are caused by long periods of discontent which follow the poor years caused by the sun spots.

So the next time you feel like picking a fight, or drinking up your life's savings, you can blame it on all the sun spots.

SO you think Hitler is pretty good at this blitzkrieg stuff? Well, he's a small town boy compared to the blitzkrieging on the Moon. We'd hate to live there because even without war bigger bombs than Hitler ever thought of are likely to fall in our back yard at any time.

Each day millions of high speed meteorites smack mercilessly against the surface of the Moon. With no cushion of atmosphere for protection, the Moon is constantly undergoing a spanking from shooting stars that strike the surface at speeds of more than 25 miles per second. You would be far safer under shell fire in No Man's Land than anywhere on the surface of the Moon.

But don't go out to No Man's Land to test our theory. Right now, it wouldn't be such a good idea!

"It's Adam Wallflower. His motor overheats when he dances and he gets B. O. O.—burned oil odor."

NO doubt you've noticed the effect of the war on our story titles this month. Robert Moore Williams dropped in a few days ago and asked us "What next?" So we showed him a cover by Robert Fuqua (the one on our front cover this month) and said, "How about a yarn based on this cover?"

"Who's the geezer with the big head?" asked Williams. We tried to be funny and said, "Maybe he is one of the fifth columnists of Mars."

Darned if Williams didn't take us at our word!

NOT to be outdone, Frederic Arnold Kummer, Jr. did a little blitzkrieging of his own and threw a little U-235 into the plot; came out with "Blitzkrieg—1950!"

WE have heard a lot about the tremendous pressure in the ocean's depths, but it remained for Captain Craig, famous deep sea diver, to register a most potent complaint about this phenomenon of nature.

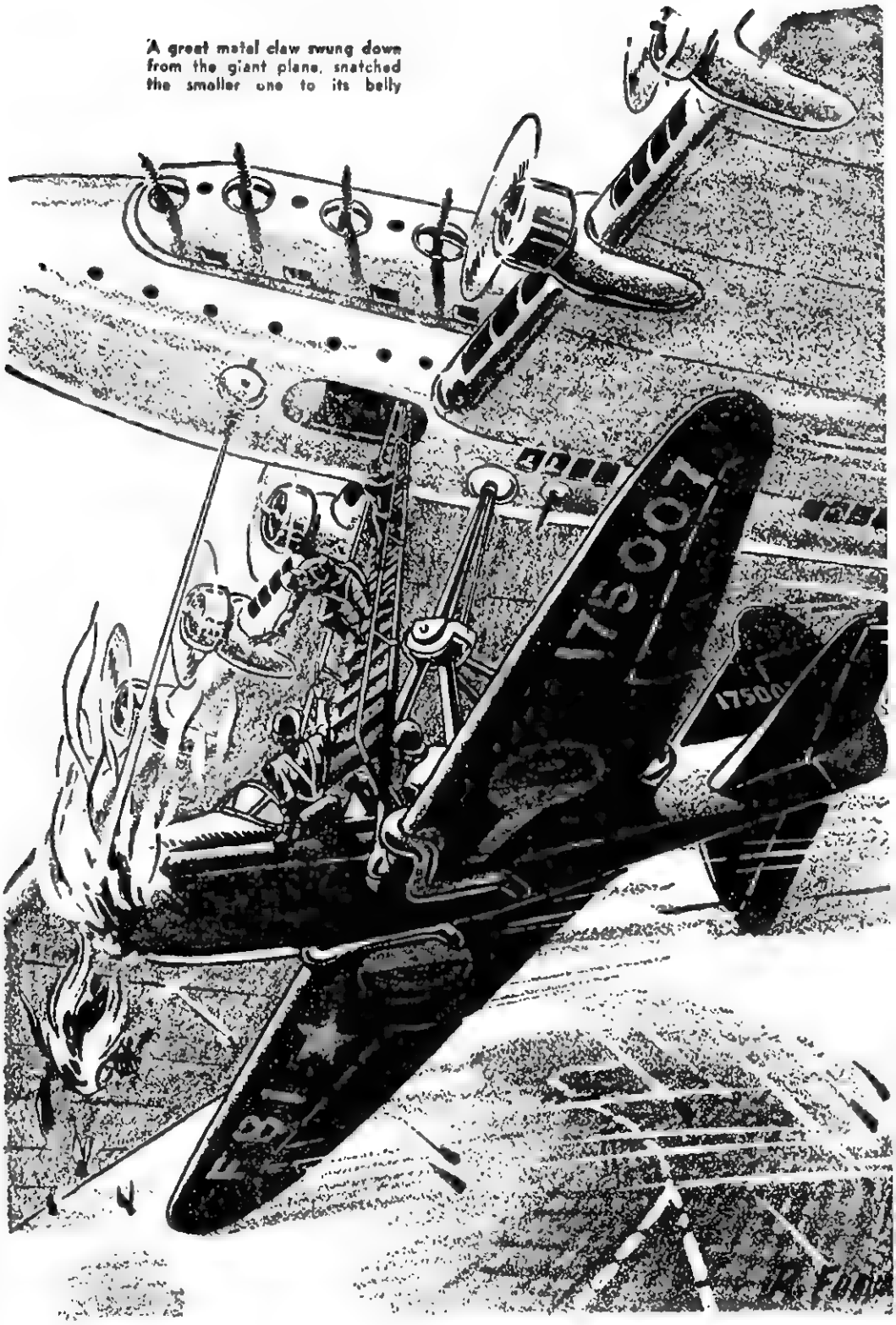
It happened when he went to salvage a cargo of wine and had successfully located the ship. He and his crew brought the liquor to the surface only to find that the sea pressure had forced the corks deep into the bottles and sea water had ruined the wine.

We admit that we, too, would have been disappointed after risking our lives in anticipation of a bottle of really old wine.

Sea pressure increases at the rate of one ton per square inch with each mile of depth. Pieces of rope sent down to a depth of six miles were compressed to half their diameters. A piece of wood became so compressed that it no longer floated after being returned to the surface.

OUR last contest proved so popular that we have decided to feature more along various lines in future issues. We expect to present our second contest in the October issue. So keep your eyes peeled for something new, interesting and simple, with some very nice prizes that should be easy to win.

HAVING given you that tip we will close up the Observatory for another 30 days. Meanwhile, we wonder how many more secret weapons Hitler will lift from the pages of AMAZING STORIES. That 70-ton land battleship of his—the pillbox-busting tank—was on our back cover last December.—*Rap.*


A great metal claw swung down from the giant plane, snatched the smaller one to its belly
17500
FBI

BLITZKRIEG — 1950!

by **FREDERIC ARNOLD KUMMER, JR.**

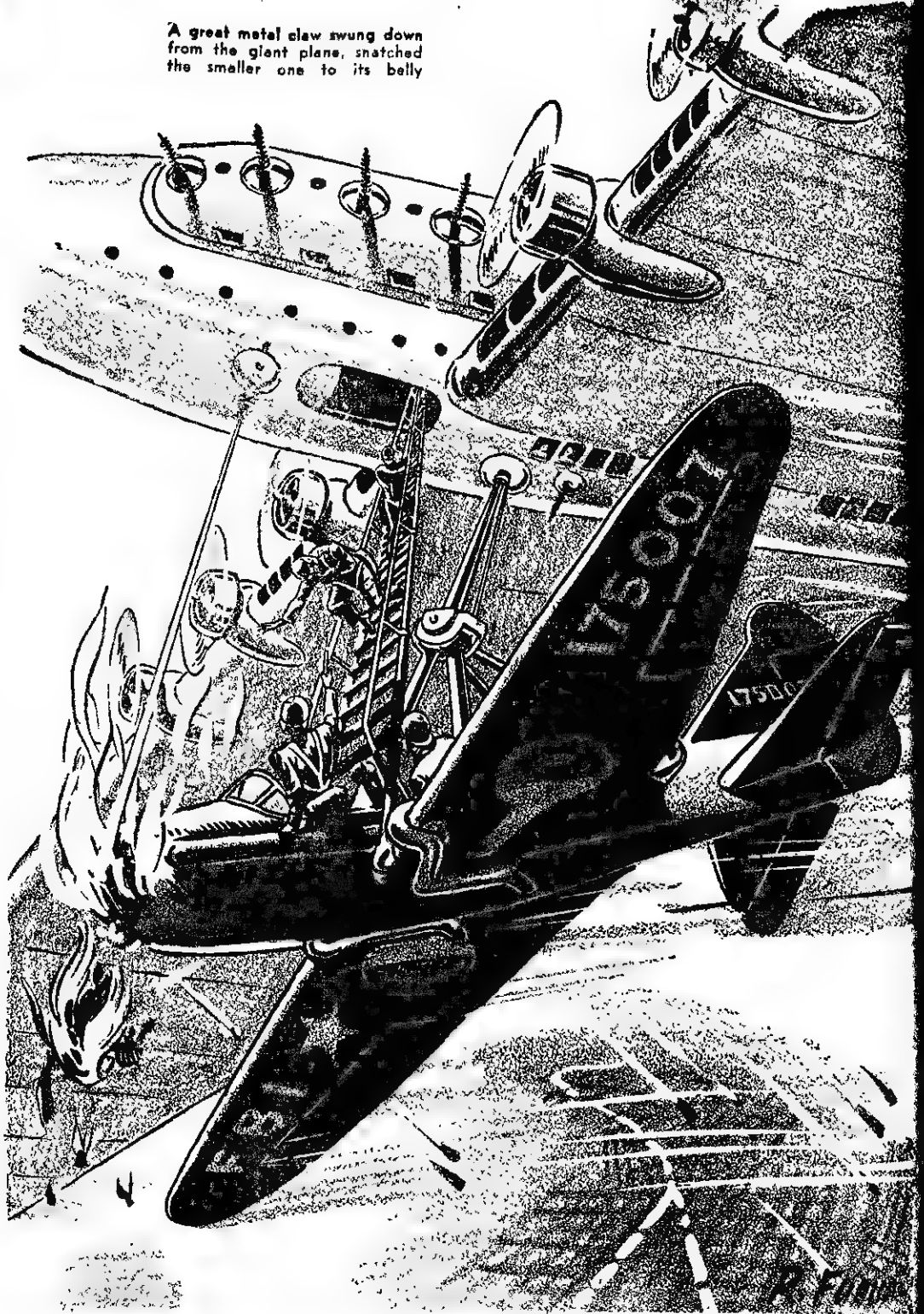
Coale had the secret of U-235 in his grasp. Then out of the sky came the minions of a conqueror seeking atomic power

"YOU look as though you've been working hard," David Coale's visitor offered affably.

"I have." Coale's tone implied that he wished to get back to his work. He put it more directly in the next breath. "What do you want?"

Coale was a constant victim of unfair appraisal. He looked the complete Lincolnesque dreamer. Even those who knew him well, with the possible exception of Mary Vaughn, delighted in comparing him with an absent-minded professor, and pointed to his amazing research work as proof.

In some respects they were right. Because it is doubtful, for instance, if he realized that in the turmoil following the European War, one man who called himself Grom — "the thunderbolt" — had become head of a United Europe. It is doubtful if David Coale realized that Shirley Temple had made her first adult picture, that the song of the hour was "Love in the Clouds," that the first aerial traffic cops had made their ap-



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pearance in helicopters over Manhattan.

Such ignorance of current events bespoke a man completely lost in his work —but that he was an incipient, weak-kneed dreamer proved, in the light of subsequent events, entirely fallacious.

Perhaps it was because he was tired, more hollow-eyed than usual; or perhaps it was because he stood before the laboratory's background of isotope filters, cyclotron recording machines, and mass spectroscopes. But whatever the cause, this particular evening Dave Coale looked more like the forgetful young scientist than ever.

"What do you want?"

In answer the small tanned man opened his wallet, exhibited a card.

"You were expecting me, I believe. Walker, of the F. B. I." His voice was businesslike. "My reason for coming here is just this. As you know, the nations of the world are becoming more and more dependent upon their scientists. Where statesmen and generals used to control the destinies of their people, now some chap like you, fiddling around a laboratory, can change the fate of the world.

"Take Grom, the head of Federated Europe, for instance. Working in obscurity somewhere in the Balkans he perfected the Z-ray. Within six months he and his crowd of fanatics had knocked off the big nations, which were played out by war, and made himself kingpin. We'd have gone under, too, if the secret of the Z-ray hadn't leaked out."

Dave Coale smiled wearily. "Do I look as though I want to be a dictator?" he asked. "All I ask is to be allowed to continue my work in peace."

THE G-man disregarded the inference in the words.

"I know, Mr. Coale," he said evenly. "We've no fears about you. But we understand you're working on something big in the power line, and if it should fall into unfriendly hands . . ."

"What I'm working on," Coale interrupted, his long fingers drumming impatiently on the desk, "is something every schoolboy knows. In May, 1940, the uranium isotope U-235 was first produced in quantity. It was then discovered that one had only to run a stream of cold water over it to get unlimited power."*

"That's all!" the lean little F. B. I. agent exclaimed. "But such a force could be used as a terrible explosive—"

"One pound of which would be equal to thirty million pounds of T.N.T. The one pound, if exploded at the same speed as T.N.T., would release a pressure of a hundred million atmospheres, or roughly a million times the pressure of any known explosive."

Dave Coale brushed the hair from his eyes.

"All this has been fully discussed in recent years. And at the request of the State Department, I have taken precautions."

Coale swept the room with a gesture. "Walls, floor and ceiling of concrete.

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* The reason for this is that free neutrons, caused everywhere by cosmic rays, will pass through the atoms of U-235 at their normal speed, but are slowed down by the protons, or hydrogen atom cores, in the water and explode an atom of U-235. This releases other neutrons which are in turn slowed down and we have a chain reaction, liberating 200 million volts of energy per atom. And considering the fact that there are 2500 billion billion atoms of U-235 to a gram and 453.72 grams to a pound, it is a source of almost limitless power.

Normally U-235 is static. Run water over it and it commences to give off its terrific energy Stop the water and the reaction stops. Simplicity itself. All this was known in 1940, just as television was known years before it became practicable. The hitch was first in separating U-235 from ordinary uranium. An isotope with the same number of electrons, it couldn't be done chemically. David Coale found a way to do this, and also of applying the released energy.—Ed.

Window barred. Such notes as I keep are in code. I see no one except my family and my fiancée, Miss Vaughn. Within two weeks I shall turn my records over to the government and forget the whole matter. Why this sudden fear for my safety?"

"I'll tell you." The government agent leaned forward. "Ever hear of Dr. Sigmund Proust?"

"The physicist? Of course!" Coale nodded impatiently. "His work on the so-called brain-waves is noted. Why—"

"Just this." The F. B. I. man's lean face went grim. "Three months ago he and his family disappeared. Vanished into thin air. Without a trace. And that's not all! Six weeks ago Professor John Bannerman, perhaps the greatest chemist in America, disappeared. His home was found deserted.

"The day before yesterday, the country place of Hugo Parton, the nation's most advanced plane designer, burned to the ground. We found no remains in the ashes. Moreover, there were certain curious implements found in the Bannerman case that indicate a diabolical plot. Our strength in time of war depends not on generals and admirals, but on the brains of our scientists.

"That's why I'm here—to advise you to take every precaution. If your discovery should fall into the hands of an enemy—"

"But . . . Good Lord!" Dave Coale hunched forward his big shoulders, shook an incredulous head. "You can't force men to reveal their work if they don't want to! It's fantastic, ridiculous! How could anyone—"

A sudden shattering of glass at the laboratory window interrupted him. Wallace, the G-man, whirled, reaching for his gun. A pane had been smashed and between the heavy iron bars, two tiny winged objects had darted. One of them circled aimlessly about the room, blundering into the walls, but the other droned straight for Dave Coale, who was nearer to it than the F. B. I. man.

"Look out!" Wallace shouted, hurtling forward. "One touch and—"

STRAIGHT for Coale's face the little metal object darted. Coale leaped to one side, but the flying thing turned to pursue him. Blindly the young scientist threw up one arm, and a needle in the "insect's" nose passed through the loose-hanging folds of his smock. Before the assailant could extricate itself, Wallace had struck it with his gun butt. The strange object clattered to the floor.

"Pierce your skin?" the G-man demanded.

"No." Coale shook a dazed head. "Caught in the slack of my sleeve. But what on earth—"

"Robots." Wallace picked up one of the small birdlike devices. Of aluminum, its wings were thin; a propeller at its tail drove it. Smashed open by the gun butt, an interior choked with intricate machinery was revealed.

"We found two of these after the Bannerman disappearance," the F. B. I. agent said. "Doped needle in their noses, tiny gasoline engines in them, like model planes; only much smaller. But that's not the damnedest part by a good bit. They are aimed toward a window, smash through the glass, and then follow the brain-waves toward any person inside!

"The way it was explained to me, each human brain gives off waves; some alpha waves, some beta waves. Discovered by a guy named Berger back in 1929. These robots, once they get close to a human being, follow these rays like a radio beacon until they stick the victim with the needle, fill him with dope.

"But since the kidnapers can't tell whether the person or persons they're

after have alpha or beta brain emanations, they send two robots: one to follow the beta waves, one to follow alpha. Apparently we both have the same type, which was lucky. Cute little gadgets, aren't they?"

"Good God!" Coale stared at the miniature robots, his eyes smouldering. "Then you were right!" Suddenly a thought struck him. "Proust was an authority on brain-waves! They must have forced him to design these devices! Only the skill of a genius could have perfected anything as intricate as this. And after they've doped their victim—"

"The men behind this come in and carry him out. No fuss, no fight. A man on either side of him, I guess, getting him to a car or plane. Only this time"—the wiry little G-man grinned crookedly—"there isn't going to be any victim! Come on, Coale! My plane's on the roof! We're heading for Washington!"

"Washington?" Dave Coale repeated. "But if you stay here, you may be able to capture them when they come in."

"We don't know how many are coming or how they're armed. Might have Z-rays or some kind of a nasty new device. You're just a bit too valuable to this country to risk, Coale! My orders were to see that nothing happened to you—and I'm obeying! I'm turning you over to F. B. I. Headquarters, where someone else can worry over your safety! Now get that record book of yours and come on!"

Still in a daze, Dave Coale followed the little government man from the laboratory. It all seemed so fantastic, so unreal. One minute he was hard at work, lost in his usual fog of concentration; and the next, he was plunged into this turmoil of wild adventure. If he had known this would follow when he started work on the isotope U-235 . . .

"Okay," the F. B. I. man grunted as the elevator stopped at the roof. "Step on it!"

HALF a dozen privately owned planes stood on the big rooftop hangar. Wallace led the way to a light maroon-colored job on the runway.

"Hop in!" he snapped. "We—"

Furious shouts from the elevator made him bite the words off short. A dozen men were pouring out onto the rooftop hangar, weapons glittering in their hands. Their leader raised a shining chrome and glass tube. A streak of wavy distorted air, like that above a too-hot radiator, was visible. A section of the iron railing about the roof's edge, struck by the beam, glowed white-hot.

"Z-rays!" Wallace cried. "Here goes!"

The motors roared and the little plane shot ahead, leaped skyward.

"Why don't they shoot?" Coale muttered. "They could pick us off easily."

"They want you alive, remember. You're no good to them dead. Long as we're in the air they won't dare attack, for fear of our crashing. That's why I took the chance. Figured that Z-ray blast was just an attempt to scare us."

The G-man settled back in his seat. "Washington, here we come! And will I be glad to check you at Headquarters, Coale! You're double-trouble to anyone just now!"

CHAPTER II

Capture

HER motors purring softly, the little plane bore steadily south. Wallace had climbed to the 20,000-foot level where traffic was light. Below them an occasional commercial or passenger plane droned by, bird-like against the

green fields and wooded areas of the distant ground.

A change had come over Dave Coale as the rows of figures and formulae faded from his brain. No longer the student, the painstaking research man, he began to feel the zest of adventure. His discoveries in the refining and application of U-235 took on a new light.

They weren't just laboratory notes, experiments, now; they represented a vital force, a force that could mean destroyed cities, shattered armies, ruthless conquest. The liberty of America, of perhaps the entire world lay on the young scientist's shoulders. All that green and smiling countryside below them could be an inferno of titanic explosions; all that mankind so laboriously constructed could be snuffed out.

America, where men still dared to talk and act according to their consciences, depended on Dave Coale! Never before had his own importance dawned on him, nor the terrible responsibilities of his scheduled work. He straightened his massive shoulders; his big knotty hands gripped the armrests.

"Funny!" Wallace glanced at him, grinning. "Why you scientist guys never see the importance of your own work beats me! You get a correct arrangement of atoms or molecules or something, write a long-worded treatise about it, and don't realize what it will mean to the world!

"Then some smart guy comes along and uses it to change history, while the real discoverer—"

The G-man broke off, staring up through the glass roof of the cabin. A large six-motored plane, dwarfing the little maroon job like an ocean liner would tower over a fishing smack, had droned out of the clouds, was hovering ominously overhead. Black, menacing, the strange plane seemed a hawk poised above a sparrow.

"Hm-m." Dave Coale frowned up at the great black plane. "They're too close for comfort. Better give them the siren."

Wallace tugged at the coupé's siren, but in spite of its warning scream, the dark shadow settled lower. The G-man's face tightened.

"Looks like our friends again," he muttered. "Didn't think they'd give up without a struggle. Still, I don't see what they can hope to do. Shoot down this job, and the secret's lost for good. They won't dare try that."

He opened the throttle wide, but the light plane's single motor was no match for the six roaring engines of the huge bomber-like pursuer.

Eyes like gunmetal, Dave Coale bent over the plane's radio, then shook his head in disgust.

"They've a powerful set aboard that blankets us," he exclaimed. "We can't —Good Lord! Look!"

Wallace glanced up. The big plane was less than ten feet above them, keeping at their speed. And from its sable fuselage two immense iron claws, operating as smoothly as retractable landing gears, were descending! The attacking plane was like some giant condor, poised to strike at its prey!

Swiftly, instinctively, the G-man swung his controls, but the black plane, expertly piloted, kept above it. Nearer and nearer it came, despite all efforts at escape. Suddenly the iron pincers clamped about the coupé's wings, locked firmly into place! And at the same instant a blast from a Z-ray above tore the smaller ship's motor to fragments! The little maroon flyer was helpless in the grip of the big ship's metal claws, its light weight easily supported by the six powerful motors.

"Clever!" Wallace muttered. "Terribly, damnably clever! They don't dare risk killing you and so—" He drew

his automatic, peering upward. "Unless some passing plane spots us . . ."

BUT even that hope was cut short. The big black ship nosed upward into a fleecy bank of clouds, completely concealing itself from any air traffic of the lower levels.

A ladder was lowered from the huge ship. Dark shapes descended, ghostly in the misty clouds.

"They're coming down!" Dave Coale's lips were a bleak line; he tossed the coded notebook from the plane's window, smiling grimly. "Exit the notes of the experiment! And I'll follow them before I give the results of my work to this gang of butchers!"

"Stout fellow!" Wallace nodded. "You're not such a foggy-brained scientist as I thought!"

He pointed the muzzle of his gun upward, fired. The glass roof panel splintered and one of the hazy figures, descending the ladder from the upper plane, gave a harsh cry, toppled into oblivion. Before Wallace could fire again, one of their attackers had hurled a small round object through the smashed roof panel into the cabin. A container of some sort, it broke, gave off clouds of yellowish vapor.

"Gas!" Coale leaped forward to smash open the windshield, but already his lungs were full of the sickly sweet, geranium-scented stuff. He saw Wallace drop his gun, stagger to the floor. Reeling, overpowered by a strange lassitude, one thought kept pounding through David Coale. He mustn't let them capture him alive, force the secret of U-235 from him! Mustn't, no matter what happened!

That geranium smell—*

Coale crawled toward the plane's door, fumbled for the catch. Air! If he could get air, he'd have the strength to leap to oblivion, taking his great secret with him. U-235 . . . cities blasted . . . America losing its freedom . . .

With a heart-breaking effort Dave Coale drew himself up, pressed the door's catch. Before it swung open, however, a hand gripped his shoulder, dragged him back. Tall, dark-clad figures, their faces hidden by hideous gas masks, filled the tiny cabin of the plane. Very weakly Coale tried to struggle but, sick, overcome by the nerve-gas, he was quickly subdued.

"This is the one." A muffled voice spoke from behind a gas mask. "Take him up to the ship."

Leaving Wallace limp and huddled on the cabin floor, two of the attackers carried Dave Coale up the swaying steel ladder, through a trapdoor in the plane's belly. In the main saloon he could see heavy cannon, bulky Z-ray projectors; the ship, his dazed senses told him, was more of a fighting craft than a passenger plane.

A tall gaunt figure in grotesque gas mask rubbed lean nervous hands.

"The last one!" he murmured. "Once we get the secret of U-235, no one will be able to resist us!"

He glanced down at the little flier still secure in the great steel claws of the larger plane.

"Let it go!"

"No!" Dave Coale whispered, staring with reddened, horrified eyes through the trapdoor. "Wallace . . . in plane . . . you can't . . ."

But the gaunt figure made a commanding gesture, and one of his followers was hastening to obey. A tug at a lever and auxiliary motors whined, the steel jaws that clutched the wings of the smaller craft opened, and the maroon coupé plummeted earthward

* Nerve-gas, first used in the 1940 war when the Germans captured the Belgian fortress of Eben Emael. Sickening stuff that renders men helpless, weak.—Ed.

through the clouds, bearing the unconscious F. B. I. man to terrible death!

DAVE COALE shook himself. The effects of the nerve-gas were wearing off, and a diamond-like hardness had come into his seeking, scientist's eyes.

"You swine!" he grated. "By God, if it's the last thing I ever do, you'll pay for this! I . . ."

The gaunt man laughed mockingly.

"Don't be so hasty!" he grinned. "You might regret harming those dear to you!"

He signaled to one of the men in the rear of the cabin. A moment later a door opened and the man returned, leading a dark-haired girl.

"Mary!" Coale burst out. "You . . . on this plane . . ."

"Exactly." The cadaverous leader nodded carelessly. "Her presence, we felt, might persuade you to be reasonable."

But Coale wasn't "reasonable." He threw off his years of quiet calm and went primitive with a vengeance. Desperately he tried to shake off the leaden feeling of his limbs, to snatch the gun from the commander's holster.

Before he could do so, however, a pistol butt thudded with sickening force against his temple. A million miles away he heard Mary scream, heard the chief of his assailants give a grunt of satisfaction. Then he was falling, falling into a black pit that had no bottom.

CHAPTER III

Fate's Cruel Irony

DAVE COALE remembered little of the next few hours aboard the plane. Through pain-racked mists he saw the small cabin in which he was confined, heard the steady unending beat of motors. His head ached savagely and his thoughts were all jumbled, a montage of fleeting pictures.

Wallace, a limp, gasping figure, hurtling to his death . . . Mary, pale, bewildered, a captive aboard this ship . . . and himself, possessing the secret of refining, applying U-235 . . .

In enemy hands it would mean blasted cities, millions dead, ruin that would make that of the 1940 war seem like child's play. Haunted by terrible visions, Coale tossed restlessly until one of his captors, presumably a doctor, gave him a bitterish capsule and he fell into a dreamless sleep.

It was Mary's voice, endlessly repeating his name, that aroused him. He opened his eyes, found himself in a large, gloomy room, surrounded by well-armed guards. The girl was kneeling beside him, wan, dazed, as though she were living some mad nightmare.

"Awake, eh?" The words, spoken with a heavy foreign accent, came from a massive, jut-jawed man seated at a desk. Glancing up, Dave Coale grinned harshly.

"Grom!" he muttered. "I might have known!"

"Yes." The dictator nodded his squarish head. "You are honored, to be received by me. I've come all the way from Central Europe for this meeting. But you are important, Mr. Coale . . . like myself, a man of destiny. By use of the Z-rays I succeeded in doing what so many men failed to do. Caesar, Napoleon, Hitler—I have made their dreams come true.

"Now, by use of your U-235, I intend to unite the entire earth. Create a world state under my domination. An end to all wars, once we make the world state a reality. And by use of your

methods for the refinement and application of U-235, it will be simple. A few American cities destroyed by rocket-bombs, powered and exploded by the uranium isotope . . ."

"No, thanks." Coale shook his head. "We've seen your work in Europe. No liberty, no free speech, lives subordinated to the state. A glorified ant-hill. If you think I'll . . ."

"I don't think, Mr. Coale. I *know!*" Grom glanced at Mary. "If there's anything I detest, it's melodramatics. To be forced to do anything so revolting as to torture this girl would smack of decadent sadism. I am a revolutionary, a creator of a new order, not a monster.

"But as much as I detest the thought, I can assure you that I will not let one or two lives interfere with the destiny of the world. Be reasonable. Accept the inevitable. I can promise you a place of high honor when the new state has been created."

Coale turned to Mary, young and slender, very lovely in spite of the fear in her eyes. Torture! But that was a thing of the middle ages, the Inquisition! In this day and age . . . Yet beneath Grom's stolid exterior there was a certain coldness, logic, and utter lack of personal emotion. Somehow he didn't seem a man—he seemed a force, ruthless, irresistible, inhuman.

"Put him with the others." The dictator motioned to his guards. "Give him time to think it over."

They saluted, led Coale from the room. One backward glance he had of Mary, a pale ivory statuette; of Grom, gripping the belt of his army uniform and barking orders. Then the guards led him along the corridor. Lips drawn in grim lines, he followed the two burly men. Six hours before he had been at peace in his laboratory. And now this madness! It seemed as though the past, the quiet research in New York, were another world.

AT the end of the corridor a large metal door loomed. One of Coale's captors unlocked it, forced him through. The young scientist blinked in the fierce sunlight that streamed through the barred window of the room. He appeared to be in a workshop or laboratory of some sort. Perhaps a dozen men were bent over tables, desks, seemingly hard at work on plans, designs, formulae. A stocky, bearded man glanced up as he entered, shook his head.

"Coale!" he exclaimed. "You too! I was afraid your work on U-235 would doom you! Welcome to hell!"

Dave Coale stared. The speaker was Bannerman, the chemist, who had so mysteriously disappeared from his home in New Jersey. Beside him was Hugo Parton, the plane designer, while among the others Coale recognized Mendez, the Argentine Nobel prize winner, Hachiti, the famous Japanese biologist, Graham, the Australian metallurgist.

"Regular 'Who's Who' of science, isn't it?" Bannerman smiled wearily. "Grom steals only the best brains to put to work on his war plans. You're honored."

"But where are we?" Coale glanced through a window at the array of buildings, factories, the sand dunes beyond. "And why do you work for him?"

"Why? Why?" From the crowd of silent, engrossed men a scarecrow figure emerged. Face sunk over toothless gums, eyes deep, tortured, figure bent and emaciated, he was only a travesty of the physicist Sigmund Proust.

"Look at me, and you'll see why! In that building over there" — Proust pointed across the courtyard—"they keep our wives, children, sweethearts. I was stubborn, would not give Grom

the secret of my brain-wave experiments. I saw my wife and children burned to death before my eyes. Still, for my country, I would not obey Grom. Then they commenced to work on me."

He shuddered. "I—I am human. Flesh and blood can stand only so much. Be wise, young man. Obey!"

Bannerman nodded somberly. "We've no choice. Lao Tze the Chinese physicist, killed himself rather than work for Grom. As punishment his wife died, horribly. They made us watch, just in case we had similar ideas. It's brawn over brains, Coale. Brains, physically weak, enslaved. Don't you see?

"In the old days conquerors made slaves of the strong, put them to work. Grom's modern. He's made slaves of the world's best brains, using their genius to perfect the greatest of all war machines and to deprive his future enemies of scientists.

"Proust, here, with his brain-waves, perfected the little robots that got me and you, too, I guess. Parton's got orders to design a sort of long-range rocket plane, sent along radio beams to blast cities thousands of miles away.

"They'll use your uranium isotope as an explosive, no doubt. I'm to devise an artificial silk for Grom's parachute troops."

Dave Coale studied the plants and factories that surrounded their prison. The guards, he noticed, carried only heavy automatics, since Z-rays at close range would have blasted their own buildings to bits. Savage white sunlight drenched the fortress-like structure; the heat was staggering.

"How about escape?" Coale demanded. "You're chemists, physicists. Surely here in this workshop you could manufacture some weapon. . . ."

"WORKSHOP?" Bannerman laughed. "D'you think they're fools enough to give us equipment, chemicals? We do the paper work—designing, planning, outlining experiments for Grom's staff of scientists to perform. Then they give us the results and we study them.

"Proust is allowed small electrical apparatus with a low-amperage current. Parton can work on miniature planes, they give me all the silk and nylon I want for study—but when it comes to heavy tools or machines, dangerous chemicals, no soap.

"Moreover, in addition to armed guards, we happen to be in the middle of the Sahara in what was formerly French Algeria. We'd die of thirst before we'd gotten twenty miles away. "Forget escape, Coale. It's impossible!"

The other men in the room were glancing irritably at Bannerman and Dave Coale, now. The sound of conversation disturbed their thoughts, and they knew the penalty for failure to complete their day's work. Experiment notes to be checked, designs to be completed, models to be tested—brain slaves of the dictator, they had lost their fight, their spirit.

Suddenly Coale, peering through the grating of the window, stiffened, his face pale. Several of Grom's men had come into the courtyard, and between two of them walked Mary Vaughn, her dark hair in disarray, her dress torn, ragged. Grom strolled over to the window, smiling sardonically.

"Since you're so reluctant to tell us about U-235," he said, "we're forced to conduct our own experiments. Now as I understand it, the isotope is normally only a gray heavy metal. But when surrounded by water the free neutrons, always present because of the cosmic rays' effect on air atoms, are slowed down to such an extent that they smash the U-235 atoms and liberate tremendous heat energy.

"Now, since the human body is largely water, I wonder just what would happen if someone, say Miss Vaughn yonder, were to swallow a fragment of it."

Grom drew a small, round capsule of the gray isotope from his pocket, tossed it carelessly from hand to hand.

For one long minute Dave Coale stared incredulously at the tiny bit of metal. So many times he had seen a block of it, in the laboratory, turn water to steam. To swallow it would be like having a live coal in one's stomach. . . .

Mary, to suffer that torture because he refused to divulge his secret! He glanced at the girl out there in the courtyard, then at Proust's livid, pain-marked features—and his shoulders slumped dejectedly.

"Okay," he grated and his eyes were like the pits of hell. "You win! I'll play ball!"

The weeks that followed were rather like a weird delirium to Dave Coale. Hour after hour he sweated in the big prison, reconstructing his notes, his lab book, giving experiments to Grom's chemists to be performed. No time to reconsider, to reflect on the horror the dictator would let loose when the secrets of U-235 were in his hands. Like the other captured scientists he was a robot, a slave, immersed in toil, driven on remorselessly.

When the method of extracting the isotope from uranium ore was revealed to Grom's chemists, Coale outlined the new method of applying it. No mere running of water over it, and thus obtaining steam; but a direct application of the tremendous energies released by the break-up of the atoms.

Nor did this end his labors. With Parton, the plane designer, he was forced to make plans for the utilization of the new power source in great rockets, each carrying tons of the deadly explosive, to be directed by radio toward American cities, blast them into oblivion and submission.

A terrible hopelessness came over Dave Coale. To refuse meant torture, torture that drove men to obey no matter how strong their will to resist, while suicide was impossible because of the vigilant guards. Yet he was working to bring about the downfall of his own country, to stamp liberty from the face of the earth!

Blindly he toiled on, wondering when this insane nightmare would end.

CHAPTER IV

The Crucial Hour

THE big prison was hot in the searing North African sun. Dave Coale stood by a window, staring across the dusty, sun-swept courtyard at the women's quarters. Somewhere in that gray concrete building Mary Vaughn was imprisoned, along with the wives and children of the other scientists. Before its barred windows figures passed, but he could not tell at that distance which was hers.

From the sprawling factories clustered about the broad court, the steady drone of machinery issued. Here was the refinery where the crude uranium was filtered of the precious isotope U-235. *His* method, used to create an explosive that would rain death on America.

Another factory was turning out the huge projectiles, each as big as a large plane. Rocket-powered, with stubby wings they needed no human hand to guide them. Radio beams, fixed by "fifth columnists" in Washington, New York, Chicago, all the major cities of America, would conduct them to their goals.

That rain of missiles would be Grom's

method of declaring war, and would reduce cities to powder. Each of the projectiles carried twenty tons of the explosive—and twenty tons of U-235 was equivalent to *600,000,000 tons of T.N.T.!* Any one of these projectiles would instantly snuff out an entire city, leaving only a smoking crater to mark its site. And after the rain of destruction would come Grom's parachute troops, armed with Z-ray projectors, to wipe out any remaining resistance, to hold the airports for his transport planes.

Dave Coale watched the workmen roll one of the big projectiles from the work sheds. It looked like a mammoth aerial bomb, except for the curved, stubby wings, and the rocket exhausts at the rear. It was only needed to fill the body of the shell with U-235, and the deadly weapon would be ready.

Coale's hands gripped the bars at the window until his knuckles were white as chalk. Death, slavery, for America . . . and he, Dave Coale, was to blame!

Footsteps broke his chain of thought. Bannerman approached, tugging at his black beard, regarding the younger man quizzically.

"Better get back to work," he said. "Grom's here for the week-end to see how the job's going. If they catch you loafing—"

Coale laughed bitterly.

"No more work for me just now," he announced. "I've done my job. They're ready to blow hell out of America . . . thanks to me. And nothing we can do! That's the maddening part! Nothing!"

For a long moment Bannerman studied him, eyes like polished anthracite.

"I'm not so sure of that—now," he said softly. "Listen! I've been working on silk substitutes for Grom's parachute troops. They let me have all the silk I want"—he motioned to the great bolts of shimmering cloth at the rear of the room—"figuring it's harmless enough. Which it is. But—well, ancient weapons and armor used to be a hobby of mine before I was kidnaped. And I happen to know that well-woven silk in sufficient thickness is bulletproof!"

"Silk? Bulletproof?" Coale laughed. "You don't expect me to—"

"But I do!" Bannerman's voice was low, insistent. "A chap named Bashford Dean, a captain in the British army during the war of 1914-18, wrote a book called 'Helmets and Body Armor in Modern Warfare.' I've read it. During that war the British actually equipped four hundred men in each of several divisions with silk necklets, forming a sort of breastplate.

"Made of layers of finely woven silk, they weighed eleven ounces to the square foot. They were highly successful but the great cost, twenty-five dollars apiece, and the fact that they deteriorated rapidly with wear and moisture, made them impracticable."

BANNERMAN leaned forward as Coale still looked doubtful.

"Dammit, I know what I'm talking about! Japan used silk armor in the old days. Later Germany and Russia experimented with it! Look—forty-five automatics like those our guards carry have a velocity of 802 feet per second at close range! And according to British army statistics, up to 900 or 1000 feet per second, silk actually has an advantage over steel!

"I'm willing to cut up that parachute silk, make protective jackets for the lot of us if you've the nerve to try it!"

A fierce fighting light flared in Dave Coale's eyes.

"I'll say I'm ready!" he grated. "But if we do get out of this room, what then?"

Bannerman pointed to the big rocket in the courtyard.

"How about that? If she can carry twenty tons of U-235, she'll carry us. Their set-up is as follows: they fill the rocket with the isotope, point her toward, say, New York. Fifth column men in New York have set up a radio sending out a direct beam.

"When the rocket comes within range of the funnel-like beam, it follows it to its source in the center of the city. The fifth column boys, of course, duck out before it lands. But they haven't swung into action yet! So if we take the rocket, we won't have their beams to contend with, and it'll be up to you to guide her in the air by swinging her rocket exhausts.

"Once over America we hop out, parachute down. The rockets aren't built to make landings, of course. Think you can handle her by juggling with the atomic motors?"

"I can try!" Coale grinned tightly. "Tell the others! Then let's get to work on those silk jackets!"

To the two guards who brought them their evening meal, the dozen captured scientists appeared in no way different than usual. To be sure, they seemed somewhat more bulky than was normal, but beyond that the heavy silk padding beneath their clothes was not noticeable.

Dave Coale, standing idly by his desk, felt his heart-beats quicken as the four burly soldiers, hands on their automatics, wheeled the big, food-laden table into the room. Would Bannerman's device work? It seemed unbelievable that silk could stop bullets.

Coale shot a glance at the chemist. Bannerman was leaning forward, eyes aglow, a silken noose in one hand. Behind him stood Proust; Mendez, the Argentinian and the other captives, clutching inkwells, sharp compasses, anything that might serve as a weapon. The four guards were turning, about to leave the room, when Coale gave a sharp command.

"Now!" he shouted, plunging forward.

The first of the guards whirled, gun blazing. Coale felt as though two bruising, staggering blows had struck his chest. But in spite of the terrible force of the shots, his momentum carried him forward. A look of superstitious horror came over the man's face as he saw that his bullets were useless. Before he could fire again, Dave Coale had wrenched the gun from his hand.

Of the other guards, not one had escaped. Instinctively fired at their opponents' bodies, their shots had had no effect; while the rain of rulers, inkwells, compasses, had momentarily confused them. Within three minutes after the struggle had commenced, the guards were helpless!

"Lock them in!" Coale cried. "Get their guns and come on!"

He glanced anxiously at the women's prison across the way. Already, at the sounds of shots, the big sirens were wailing outside.

"Hurry!"

CHAPTER V

Triumph

INTO the hall the strangely assorted group of men streamed. Hachiti, the Jap, was muttering in his native tongue. Proust, recalling the torture that had racked his body, was wild with the thought of revenge.

As they raced along the corridor two guards rounded a corner, fired, but the silk "armor" again saved the fugitives. Bannerman's answering shots, however, sent both men reeling to the floor.

Two of the scientists scooped up the guns of the dead guards and the group

of prisoners burst out into the sun-swept courtyard.

The dusty court was a scene of furious confusion. Workers from the factories were pouring from the refinery, the workrooms, racing toward the central citadel to arm, organize. The thin searing desert air quivered under the scream of the agonized alarm siren. Shouts and a spattering of shots echoed among the buildings.

The great gleaming projectile lay like some fantastic rocket-ship, its chrome steel exhaust tubes shining in the fierce sunlight.

"Keep back the guards!" Dave Coale shouted as they burst from the prison building. "I'll get the women!"

More shots struck dust from the flagstones. Two of the scientists, hit in their unprotected legs, toppled to the ground. While Parton and Proust kept up a steady fire with their automatics, the others carried the wounded scientists into the lee of the huge projectile. Dropping behind its stubby wings for protection, they fought back as best they could. It was only a question of time, they realized, before Grom's men brought up Z-ray projectors, blasted them to dust.

Dave Coale, dashing into the women's quarters, found the corridor deserted. The massive iron door that separated him from Mary Vaughn and the other women was, however, securely locked. Desperately he pounded on it; but as well try to batter down a stone wall with his fists. Sudden footsteps, clattering along the corridor, sent him spinning about.

Two of Grom's soldiers, carrying heavy Z-ray projectors, appeared at the intersection of the passageway.

One hastily aimed shot from a ray gun tore at the bricks behind Coale. Blindly he pressed the trigger of his automatic, firing with desperate haste. One of the guards swayed, toppled against his companion, staggered him. Before the second man could recover his balance, Coale's fist had crashed against his jaw, sent him to the floor.

Outside, the shots were rattling in a furious crescendo, mingled with shouts from Grom's men in the citadel. With desperate haste Coale snatched up one of the Z-ray guns, leveled it at the iron door. At once the door turned red; its lock fused, ran in a molten stream. Coale kicked at the glowing portal, saw it swing back.

A dozen terrified women and children huddled against the rear wall of their prison, stared at him in nameless horror. Then Mary had detached herself from the group, was running toward him.

"Dave!" she cried. "Dave, what is it—"

"Quick!" He motioned the captives forward. "This way! Hurry!"

Over the red-hot sill, along the corridor they raced. As they burst into the courtyard, Coale could see that the scientists were hard pressed. Mendez had been shot through the head. Several of the others were wounded in arms or legs, which were unprotected by the silken armor. Coale swept the citadel loopholes with the Z-ray gun, and the fire from Grom's men slackened noticeably.

"Now!" he cried. "Before they bring out their own ray projectors!"

PARTON and Bannerman sprang forward, unscrewed the shining nose of the mighty projectile. Dave Coale motioned the women and children into the hollow space intended for the deadly explosive isotope. As they crawled into the metal chamber, a living cargo instead of twenty tons of U-235, Coale's face suddenly hardened.

The stubby-winged projectile was no

ship or plane—like a giant sky-rocket, it required someone outside to touch off the uranium motors that would send it into the heavens!

"In you go!" He waved the other scientists through the opening. "I'll stay outside to start the atomic blasts!"

"You!" Parton cried. "But— Good God! We'll need you to guide this projectile!"

"No time to argue!" Coale fired a blast at the citadel embrasures. "I'm staying. . . ."

He whirled as a gun dug into his back. Sigmund Proust, his torture-marked face set in fierce fanatic lines, stood behind them.

"Get in!" Proust said grimly. "I'm old, crippled. I've nothing left to live for, now that my wife and children are —dead. Nothing except to even my score with Grom! In, or I swear I'll shoot!"

For just a moment Dave Coale hesitated, then gripped the physicist's hand.

"Good luck!" he said tightly. "The world will remember. . . ."

Into the gleaming steel explosive chamber Coale and Parton hurried, snapping the big nose-piece, with its complicated detonating machinery, into place. The interior of the projectile was like some immense, pointed steam boiler. At its far end was a plate separating the explosive chamber from the atomic motors, and the radio beam directional device.

The twenty-odd men, women, and children lay huddled against the curved steel walls, pillowed against the parachutes Bannerman had taken from the laboratory. Outside, very faintly, they could hear the furious shouts, the ring of bullets upon the projectile.

If Grom's men were to open up with Z-rays now, there would be no hope. . . .

A click at the rear of the projectile was audible—and then a burst of power. U-235 atoms exploded, each atom releasing 200 million volts of energy. Proust had started the rockets!

The terrible pressure of acceleration pinned the fugitives to the rear wall of the projectile. Upward the great bomb roared, hurtling at terrifying speed toward the sub-stratosphere.

Suddenly, as Coale caught his breath, there came a roar that even in the projectile was deafening. Titanic, supernal forces were unleashed, like some cataclysmic day of doom — and their escaping craft tossed wildly, as a leaf in a whirlwind.

"Dave!" Mary caught at his arm. "What—what is it?"

For a long minute he didn't answer. Then, as the rocket craft righted itself, he spoke solemnly.

"Sigmund Proust. He said he was going to settle with Grom. There were hundreds of tons of U-235 in the refinery there—and detonation apparatus for these projectiles. We must be forty or fifty miles away, to say nothing of a couple of miles up, and yet the shock when Proust blew the whole works to bits. . . ."

"The greatest explosion the world has ever known!" Bannerman said tensely. "Grom, his workshops, his chemists, all blown to atoms! Only a crater left, perhaps hundreds of miles wide, in the middle of the desert. No one but you, Coale, knows the secret of U-235 now. And in the hands of our government, America will remain inviolate!"

DAVE COALE straightened his shoulders. Grom, his great factories—all gone! He glanced at the Z-ray projector he still held in his hand. That would cut an opening from the explosive chamber back into the rear compartment, where the motors were located. By adjusting these motors,

he could head the shell toward America; might even be able to land the steel craft, thus obviating the necessity of jumping by parachute. . . .

The unaccustomed light of battle died from Dave Coale's eyes, and the old patient, seeking, scientist's look returned. He began to trace diagrams on the metal floor, very intent.

"See here, Parton," he said reflectively. "I believe we can land this thing safely without having to bother about parachuting. Taking into consideration the wing area, and the directional thrust of the rockets—"

Watching, Mary Vaughn smiled. The two-fisted, grim-faced Dave Coale of the past weeks had been all right; but this was the man she knew and loved. A seeker after truth, delightfully, absent-mindedly tender, devoting his life to humanity's problems. A dreamer, tall, craggy, somehow Lincolnesque.

Yet to those who later might call her husband "such a brilliant man—isn't it too bad he's such a visionary?" Mary could say, with a gentle smile, that when he had been put to the test of sheer manhood, in a desperate fight to save America and the world at large from cruel dictatorship, David Coale had met the challenge magnificently.

Happily, Mary put her arm around Dave Coale's shoulder. And then, when he had finished outlining his plan to land the rocket craft, she drew his chin up to hers and kissed him full on the lips, right before them all.

TRICKS YOU CAN TEACH YOUR DOG

It's not necessary to possess a special gift or charm to teach your dog those parlor tricks that so delight the visiting company. Step by step, John Marsh, one of America's leading dog trainers, tells exactly how to teach your dog to jump, shut the door, shake hands, sit up, retrieve, and say his prayers . . . tricks that are the easiest for your dog to learn and the easiest for you to teach. If you would like to have your dog do tricks —and show your friends what a smart little Fido you own—then don't miss this authoritative, illustrated article.

I Train Vicious Dogs

"They don't come too tough for me" . . . a boast that brought Michael Motzeck a reputation as an expert trainer of vicious dogs. Hazard, a 90-pound ill-tempered German Shepherd; a pit bull terrier, the canine Joe Louis of the midwest; Jiggs, a terrifying Great Dane; a "hypnotized" Doberman Pinscher . . . these are just a few of the scores of vicious dogs von Motzeck has taught to be peace-loving canine citizens. This noted dog trainer demonstrates the amazingly complete control which may be obtained over a dog's mind through proper training methods.

Monkey Business

So you think you have troubles, eh? Well, how would you like to play host to over 600 monkeys seven days a week from early morning to near midnight? Had you all these monkeys you'd probably say, "What can I do with all these animals? Gosh, guess I'll have to go in business!" And that's exactly what a group of men have done in Hollywood! Don't fail to read all about "Monkey Island" . . . the home of one of the largest collections of Rhesus monkeys in the world! You'll find this entertaining article by Frank Cunningham in the August PETS!

August Issue

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PETS

Formerly POPULAR PETS

The desire of a lovely woman to marry is certainly no problem for a lawyer—until he finds she's only eight years old, is not legally human and calls herself an incubaby

by JEP POWELL

SHE came without an appointment but she was palpably distressed, so Patricia ushered her into my sanctum without formality.

Patricia had been my secretary-receptionist too many years to fear the intrusion would catch me grappling with a problem of more moment than an anagram.

In fact, I was just twiddling my thumbs idly and wondering why I did not retire and turn my meager practice over to some deserving young lawyer who needed it.

Fortunately, an impressive volume of Supreme Court Reports lay open in front of me.

Her blond beauty was breath-taking and she walked with natural grace; but she lacked poise when she stood in front of me, fumbling her handbag nervously. I judged her to be in her late 'teens.

At my age, young beauty no longer flusters me to gallantry. I raised myself a scant inch or two in a polite gesture and motioned to a chair.

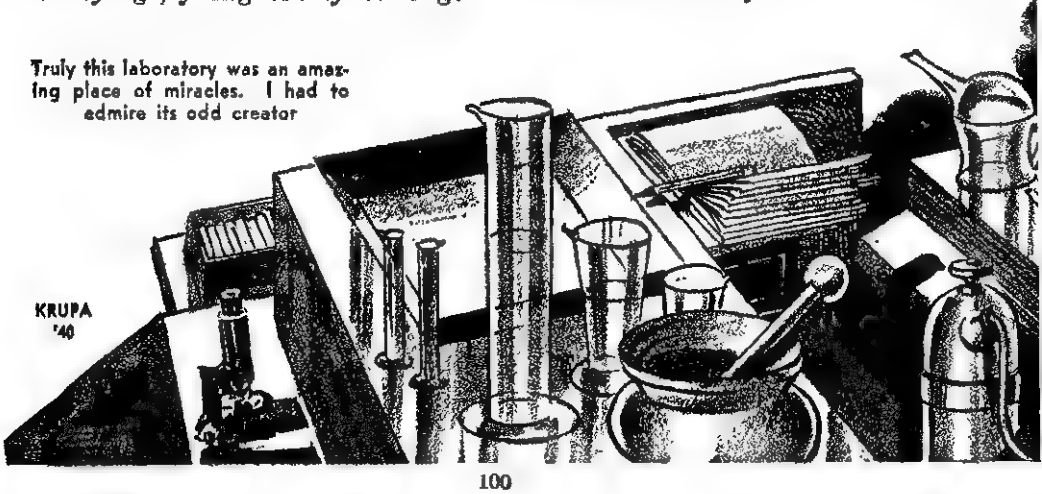
"Now what can I do for you, young lady?" I inquired, steepling my fingers and pursing my lips professionally.

"I want to get married," she declared.

"I'm afraid you've been misdirected," I smiled. "Now, if you were seeking to get away from marriage—divorce, say—it might be more in my line. But I haven't handled a divorce case in many years; don't intend resuming the practice at this late date. So, either way, I'm afraid you've come to the wrong place. Unless . . ." I was feeling in rare humor. "Unless I'm to interpret your statement as a proposal of marriage."

She looked at me quizzically. "Danny sent me here," she said in a low, vibrant voice.

"Ah-h-h, I see," I replied falsely. "And who is Danny?"



Truly this laboratory was an amazing place of miracles. I had to admire its odd creator

The
Synthetic
Woman

"Why, he's the man who wants to marry me," she elucidated. "Don't you know him?"

"From the identification you give me, I suppose I ought to," I said, unable to restrain my sarcasm. "But I'm afraid my memory is failing me. Danny who? What is his last name?"

Her face clouded. "Danny is all I know."

"What!" I gasped. "You want to marry a man and don't even know his name? How long have you known this —this Danny?"

"Since yesterday," she said. "He is nice and I like to be with him. He said if we were married, we could be together all the time. So we want to be married."

A queer sound escaped from my throat as I struggled for words.

"My dear young lady, do you know what marriage is?" I finally managed rhetorically.

"What is it?" she asked innocently.

Again I was unable to find my tongue. I squirmed as I have made witnesses squirm on the stand. Was this some sort of prank? I did not believe it was. Her large blue eyes were serious as she awaited my answer. What would I tell her? Why tell her anything? Why should a veteran trial lawyer be trapped by a young woman yet in her 'teens?

"How old are you, young lady?" I evaded adroitly.

"Eight."

I SPUTTERED incoherently and my face must have undergone dreadful contortions, because she seemed frightened.

"Preposterous!" I exploded, my eyes sweeping her perfect, mature figure. "Are you jesting or crazy? Why, you're . . ."

She sprang to her feet, eyes flashing defiance at my challenge to her statement. Her right hand flew to a slide fastener at her left shoulder and zipped it down to the hem in one movement. I reached her before she could wriggle out of her dress.

"No, no! Not here . . . I mean, not anywhere! . . . what were you . . . keep still!" I gibbered as I grabbed for the slide and jerked it upward into place. "Calm yourself, young lady," I added, dabbing a handkerchief at my forehead and sinking weakly into my chair. I was thankful my door was closed.

The phone buzzer sounded and my wife's face appeared in the photo-dial. I shuddered. Judith is not bad-looking for a woman rounding fifty, but sometimes her face can be imperious. It was imperious now. Before answering, I moved the instrument to be sure my pretty client was not in focus of the viso-lens.

Judith wanted to remind me to pick up a magazine on my way home. She hesitated before disconnecting.

"What's the matter with you?" she demanded.

"Why, nothing, m'dear. Nothing at all, I assure you. Quite nothing," I stammered.

"You've got a guilty look on your face, you old fop!"

There was a click and her face was gone. I felt better. I cleared my throat formally and returned to my client.

"Now, my dear, let's get down to business and cast jesting aside." I thoughtfully added, "But not clothes."

"I'm really much nearer nine years old," she explained sweetly. "Perhaps I should have said nine."

I was beginning to wonder, by then, if I were crazy. Here a beautiful, full-blown bud of womanhood sat before me and insisted she was eight years old, or nearly nine. Were my ears deceiving me, or my eyes?

I was about to ring for Patricia to assure me which, when the phone buzzer sounded again. A handsome but anxious face appeared in the dial. His dark, curly hair and blue eyes seemed familiar.

I announced myself: "Zachary Dunne speaking."

"This is Daniel Laird, Mr. Dunne. Is Vivian there?"

Daniel Laird had been famous just a few years before as a nine-goal man on his college aero-polo squadron. Now he was one of the country's youngest big business executives. His father had been a good friend of mine. Was *this* her Danny?

It was a moment before I could recover. I cupped my hand over the transmitter and turned to the girl.

"Are you Vivian?"

"Yes." She saw Laird and strained toward the viso-phone. "Please tell him to hurry."

Laird caught a glimpse of her and continued excitedly,

"Look, Mr. Dunne, I don't want any of my company lawyers messing with this, so I put her in a taxycle and sent her to you. Told driver to bring her right to your office. Meant to meet her there but can't . . . being followed.

"Could shake my shadows, I think, but won't risk it. Could you take her home with you tonight and bring her back in the morning? I'll meet you there at ten o'clock and explain everything. Hanging up now. Don't want the call traced. Take good care of her and tell her not to worry."

CHAPTER II

Test-Tube Girl

WHAT was the meaning of young Laird's strange actions? Why was he being shadowed? Why all the mystery? And how did this girl fit into the picture? I assured myself Laird could explain, but some misgiving lingered in my mind. I would find out something from this strange girl but I would have to question her cautiously, I decided.

"Well, Miss—ah—Vivian," I smiled assuringly, "your Danny is a fine young man. I know him."

"I knew it!" she cried happily. "Is he coming now?"

"Well—er—not immediately," I explained. "In fact, he cannot get here until tomorrow morning. In the meantime, you can spend the night with me."

Her face clouded momentarily. Then, "All right."

"Er—ahem!—as a guest in my home," I hastily amended in embarrassment.

She showed no sign of embarrassment. I could not understand this girl. In a way, she seemed as young and innocent as she claimed to be.

"Your Danny is Daniel Laird," I resumed and awaited her reaction expectantly.

"Laird? Laird?" She mouthed the name as if savoring it. "Danny Laird. It's a nice name, isn't it?"

"A nice name! Is that all it means to you?" I demanded. "Daniel Laird, aero-polo star; Daniel Laird, head of one of the country's biggest motor companies; Daniel Laird, a name uttered along with a prayer by every society matron with a debutante. But to you, it's just a nice name! Who are you, Vivian, what is your last name?"

"Vivian, is all. That's all they ever call me at the lab."

"Lab? You mean 'laboratory'?"

"Yes, Dr. Shaiman's."

"Neo Shaiman?" I blurted in amazement. "Then you're a . . ."

"I'm—I was—an incubaby."

For the fourth time within scarcely a

quarter of an hour, this lovely young creature had stricken me speechless. But now there was a dawn of enlightenment. This motherless, fatherless child of science, this pretty product of artificial creation, was just a human guinea pig under Neo Shaiman's microscope. No wonder, I thought, she knows nothing about men or about marriage.

Shaiman had educated her well in some ways, no doubt, but had omitted knowledge he deemed unfit for his purposes. He had even deceived her about her age.

Then I was shocked by the sudden realization that Shaiman's discovery which produced incubabies was comparatively new. I counted back on my fingers. Not more than ten years old. Then the age she gave—eight—must be correct!

I RECALLED that the announcement of Shaiman's discovery also mentioned his ability to speed up the growth of his test-tube offspring, but I had never seen a real incubaby. To say I was amazed by this girl is a mild understatement.

Why hadn't this unusual girl been in the news, the gravure sections, television? Did Shaiman have some deep motive — some sinister motive — for carrying on his work in secrecy? I eyed Vivian with frank astonishment.

"What is wrong?" she asked anxiously. "At the lab, they are proud of me. There are a lot of incubabies now. Dr. Shaiman says I should be proud of being the oldest." She seemed uncertain and about to cry.

"There, there," I consoled, patting her on the shoulder. "Of course you should be proud. I was just—er—bewildered."

What magic had Shaiman employed to make her into a mature, beautiful girl at the age of eight? Surely she could not answer that. I decided not to question her until later.

"Sure you should be proud, and Danny will be proud of you."

She brightened.

"How did you meet Danny?" I asked.

"He's been to the lab several times, walking around and talking with Dr. Shaiman. Yesterday my nurse brought some pretty clothes to me and, when I was dressed, she took me into Dr. Shaiman's office. And Danny was there. Then Danny and I went out and rode and rode and rode. He did a strange thing. He placed both of his arms around me and put his lips against mine." She closed her eyes. "But I liked it."

"M-m-m-m," I commented. "And what did you do?"

"Nothing. I just asked him to do it again."

"Oh, you did?" I chuckled.

"Yes. And he did. And I told him I liked to be with him, and asked him to come to the laboratory more so I could see him often. Then he told me we could be together all the time if we were married." She smiled like a happy child. "Won't that be nice?"

"Eh? Oh, yes, of course. But what does Dr. Shaiman say about this?" I inquired.

"He doesn't know it. Danny told me not to tell him. So I didn't. And when Danny came to the lab today, I was dressed in my pretty clothes again and we ran away. Two of Dr. Shaiman's helpers chased us. It was fun." She giggled. "Then Danny told the driver to bring me here and he hopped out of the taxycle."

I thought it would be well to take her home while she was in a good humor. I picked up the phone to call Judith, but immediately reconsidered and cradled it. I found myself in a quandary. If I

called Judith and told her I was bringing a child, then showed up with a beautiful young woman, it would prove awkward.

On the other hand, if I phoned I was bringing a young lady, Judith might oppose it at once. Yet I could not let Dan Laird down. I decided to take her home unannounced and straighten out matters there.

PATRICIA eyed me disapprovingly when we walked out of the office, and I told her we were going home for the day. We took the elevator to the fourth floor and walked to the Forty-second Street entrance, third level. A taxycle whisked us to the Long Island catapult at the south end of Welfare Island.

We stepped on the scales and I deposited our fares. Our tickets, with our weights printed on them, popped out of the slots and I noticed Vivian weighed 122 pounds.

A moment later we were cramped in our seats in the capsule, and a weight inspector glanced at our tickets. He told Vivian she would have to change seats with a heavier passenger. She clung to my arm, trembling.

"Can't you use a little equalizing ballast?" I asked the inspector. "This is her first catapult . . . isn't it?"

Vivian nodded. He grumbled something and moved on. Passengers 19 and 20 entered, taking the last two seats. The inspector stepped out, closed the door and locked it. There were a few moments for weight adjustments and wind velocity compensations, then our capsule dropped backward into the compression tube.

For a split second we rested at the bottom. Then, with a deafening shriek of escaping air and a faint *pop!* in our wake, we were whizzing across Long Island.

Vivian trembled and tried to bury her face in my shoulder. I put my arm around her. A nosy commuter gave me a sly wink. I glowered at him and held her closer.

"We'll be there in a minute," I told her.

The nose of the capsule began to drop and I glanced at the dials up front. I've often wondered why the dials were put there; probably just to engage the passenger's mind during that minute or two of bullet-like flight.

No one in the tube could do anything about it, if something went wrong. And there is no pilot. I watched the radio beam narrow to a fine thread. Several of the passengers emitted audible sighs of relief. We were coming in straight.

The crew at the receiving station could alter our course slightly by radio control, also shift the mouth of the reception tube to meet us squarely.

In another half minute we plunged into the tube with a roaring wheeze. We made three bouncing half-stops, then coasted to a smooth halt at the Westbury terminal.

We were lucky to grab a taxycle; and two minutes later we walked into my home. Judith was surprised at my early arrival. But she was more surprised at my pretty companion. It made me uncomfortable. The thought of the magazine I had forgotten added to my uneasiness.

"Oh, hello, Vear, this is Div . . . I mean Vivian . . . Mrs. Dunne, my viff," I fumbled.

"Charmed," Judith cooed venomously. "But I failed to catch the last name."

I TRIED to rush to the rescue, but Vivian promptly answered.

"Vivian is all the name I have."

"I see," Judith said and sniffed with just the proper amount of delicacy.

"Just Vivian," I simpered. "My

client. I brought her home for the night."

"I see," Judith repeated. The sniff was more pronounced. "In your—ah—your custody? I thought you now confined your practice to civil cases."

I glanced anxiously at Vivian and was thankful the barb overshot.

"Now, see here, Judith," I remonstrated. "Vivian is the sweetheart of one of my clients."

"Since when did you start harboring your clients' sweethearts?" she retorted. I never knew until then how loathsome the word "sweetheart" could sound.

Vivian sensed the storm. Her brow puckered and her lower lip trembled.

"I'm sorry," she sniffled. "I am to blame. There's something wrong with me. I'm not like other people. Oh-h-h-h!"

She dropped into a chair and began crying wretchedly. Each tremulous sob ripped at my heart.

"Enough of this, Judith!" I barked with a sudden surge of courage. "Don't hurt her feelings any more."

I rang for Stockbridge, our butler, and continued to scowl at my wife.

"Call Cora," I commanded Stockbridge, "and have her draw a bath. Miss — er — Miss Vivian will want to freshen up a bit before dinner. And tell Cora to come down when the bath is ready."

Judith was stunned by my unexpected outburst.

I turned my attention to Vivian, edging myself onto the chair beside her and putting my arm around her.

"There now, child," I soothed. "You're just upset by the events of the day. A warm bath will quiet your nerves. Then we'll have dinner."

Gradually her sobs abated to piteous little snuffles. Cora appeared and I sent Vivian upstairs.

"And now, Judith," I snapped. "Aren't you ashamed of hurting that innocent child?"

I told her how the girl had come to my office in the afternoon, a fugitive from Neo Shaiman's laboratory, a bewildered creature in a strange world of normal people. I scored when I told her about Daniel Laird's plan to marry Vivian. I told her everything that was said at my office—everything except with regard to Vivian's attempt to prove her age by disrobing.

I was not Zach Dunne arguing with his wife. I was E. Zachary Dunne pleading a client's cause before a jury of one. For twenty minutes I employed every bit of eloquence I ever unleashed in a courtroom. I saw Judith was weakening; but I was the weaker.

I rang for Stockbridge and ordered a Martini.

"Make it two," Judith said. "I need one."

"Make it three," I raised. "Miss Vivian should be down shortly. Maybe she'd like one."

JUDITH and I were silent for a minute.

"Well, dear, do you blame me for wanting to help her?" I finally asked.

"No-o-o, Zach," she admitted somewhat grudgingly. "But you were so mysterious. If you had explained everything at first, I would have realized she was just a child." As an afterthought, "And maybe you shouldn't have ordered that cocktail for her."

"Maybe not; I didn't think."

"Of course you must help her, Zach," Judith continued. "Just the thought of her being raised in a laboratory like that makes me shudder. Isn't she lucky to catch a nice young man like Daniel Laird?"

"Marriage intentions have to be advertised," I mused aloud. "I wonder

if old Shaiman could prevent the marriage. I don't suppose he'd give her up without a battle."

"Laird's rich," Judith informed me. "He could pay Shaiman plenty. He could pay a million and never miss it."

"It isn't that," I explained. "Shaiman is a scientist. Money probably doesn't interest him. His experiments are more important."

"But what could he want with her now? He's raised her from — from nothing to a full-grown girl."

"That's just it—to maturity," I said solemnly. "He may have further experiments."

"Zachary! You think of the damnedest things!"

CHAPTER III

Problem Child

STOCKBRIDGE brought in the Martinis. As I picked up mine, he froze as if suddenly caught in a wrong act. His eyes sought the ceiling. I glanced over my shoulder and dropped my glass.

There was Vivian, tripping merrily down the stairs and as destitute of clothing as on the day she went into the incubator. She paused and I tried to wave her back, but I was too late.

"I'm ready for my oxydyne now," she chirped.

She stood there smiling, starry-eyed, fresh. From the aureole of her shimmering golden hair to the tips of her dainty toes, she was flushed a glowing pink after the warm tub and brisk toweling.

"Chee-ild!" Judith snorted. "Get that hatchery hussy out of here this instant, Zachary Dunne, or I'll . . . I'll . . ." Her threat ended in a gurgle of rage.

"Vivian, your clothes!" I shouted, taking a step toward the stairs.

"No, you don't, you philandering old fool," Judith bellowed, pulling me back and springing past me. "I'll handle this!"

Vivian, terrified, fled up the stairs.

In one gulp, Stockbridge solved the problem of the third Martini. I did not reprimand him, or blame him, as he swallowed that cocktail in a gulp.

"Judith!" I yelled up the stairs. "If you harm one hair on that child's head, I'll . . . I'll . . . "

Another threat went unfinished. But I knew Judith's tongue was her worst weapon. I'd wait until Vivian had time to put on some clothes, then I'd go up and intercede for her.

"Stockbridge, I dropped my drink. Bring me another," I said. "But make it a brandy."

"Yes, sir." He stooped to pick up my broken glass.

"A double-brandy," I amended.

Fortified with a double-brandy I tiptoed upstairs and listened at Vivian's door. She was crying softly. There was no other sound. I crept downstairs and ordered another brandy.

At the end of five minutes I went up again. Their voices were mingled in a low hum. No anger in Judith's tones now. I sneaked back downstairs and waited; five minutes, ten minutes, half an hour.

When Judith came down her eyes were red-rimmed. She swished past me and headed for the kitchen. I caught her arm.

"Judith, you—you didn't hurt her?" I tried to force concern in my voice.

"No, I didn't," she snapped. "And anyone who does, will do it over my dead body!"

"Why, Judy, you're crying!"

"What if I am?" she blurted. "You blundering old fool! I could strangle you, Zachary Dunne — causing that

sweet child all this anguish and embarrassment."

"Who, *me?*"

"Yes, you! Why didn't you tell me she has to have her oxydyne after her bath? .. Oh-h-h, Zach .. Oh, God, dear God, forgive me!" she blubbered. "I could cut my vile tongue out for talking to her that way."

TEARS broke and cascaded down her cheeks. She was crying now, unrestrained and unashamed. I took her in my arms and held her until she had cried herself out.

"What is oxydyne, dear?" I finally asked.

"I don't know. I've had Cora telephoning everywhere. No one seems to know what it is. Maybe it is some secret formula of that old—old monster, Neo Shaiman . . ."

I cleared my throat. "Dinner is about ready, dear," I said. "Will she be down right away?"

"She will not! She's having her dinner in bed," Judith declared, "and it is not going to be served by any of these smirking servants. I'm doing it myself!" She flounced toward the kitchen.

So Stockbridge served dinner for one, and I retired to my room early to ponder the problems of this strange girl who had come to me. Could she, after all, marry Daniel Laird? What was her legal age? Would the law hold her to her calendar age, or would it recognize her biological age? Was she a legal entity at all? I closed my eyes and repeated the Fourteenth Amendment to the Constitution:

> All persons born or naturalized . . . are citizens of the United States and of the State wherein they reside. . . .

That did not help much. What would be the legal interpretation of "born"? Our scientists have made synthetic silk, wool, rubber and other products that look, and feel, and wear like the genuine articles; yet they are not permitted to label them "silk","rubber", et cetera.

Surely Vivian looked, and acted, and seemed like a normal person. But, in following out the very letter of the law, must she be labeled a "processed person", a synthetic? The thought was ghastly.

I thought of the Preamble to the Declaration of Independence. Let's see, part of it goes like this:

> We hold these truths to be self-evident: That all men are created equal; that they are endowed by their Creator with certain unalienable rights. . . .

At least that would get away from the word "born." "Created" seemed much better. Certainly Vivian was "created," if not "born"; and the elements from which a biochemist created her, in their turn, were created by the Creator. Yet all the elements of a robot also are created by the Creator.

This was not getting me anywhere.

Incubabies being comparatively new creatures, the Supreme Court had never been called upon to decide their legal status. But if old Thomas Jefferson himself had to be brought into the picture, that appeal would be made unless Vivian were given full rights before recourse to that August tribunal became necessary. With that silent avowal, I turned off my light and went to bed, tired, puzzled, but determined.

Through my window I saw the light still burning in Vivian's room. I must have been turning her problems over in my mind for hours. What was she doing awake so late? Was Judith in there tormenting her with a lot of questions when Vivian should be getting her sleep? I decided to investigate.

I HAD almost reached Vivian's room when I felt a tug at my dressing robe.

"Who do you think you are, prowling around at this time of night—Santa Claus?" Judith hissed. "Well, this isn't Christmas!"

"Her light is still burning. I decided to investigate," I explained.

"I'll investigate," she muttered.

"I'll go along," I declared firmly.

Vivian was sprawled listlessly in a large chair, a pathetic little figure in the commodious nightgown Judith had loaned her. She smiled wanly.

"Wasn't the bed comfortable, dear?" Judith asked.

"Yes," Vivian replied wearily, "but I stayed there quite a while. I just felt like moving about."

"You must go to sleep, child," Judith said.

"I'm so tired, must I go now?" Vivian pleaded, looking at me. "Will you go with me?"

Judith glared at me and doubt again began creeping into her face. Why can't women keep their minds made up? I glared back at her.

Vivian shocked the scowls from our faces with three words:

"Where is sleep?"

CHAPTER IV

Bitter Decision

SLEEP by that name or by any other was a stranger to that strange little orphan of the test-tubes. We tried all the synonyms unavailingly, and I was amazed to learn how difficult of definition sleep really is.

I crawled into the bed and gave a creditable demonstration of a man yielding himself to the arms of Morpheus, including some rough, as well as polished snoring. This served to amuse but not to enlighten our guest.

Vivian's innocent inquiry about the whereabouts of sleep, after all, was apropos. Wherever sleep may have been that night, it was indeed absent from the second floor of the Dunne domicile. We tried tucking Vivian in her bed, darkening the room, and letting nature take its course.

But Dame Nature scorned this angelic alien, or vice versa, and the darkness merely brought screams of terror. Darkness also was something new to Vivian.

Repeatedly the girl fretted for her oxydyne, so we called in our family physician. He arrived with his customary promptness and grumpiness. An inch of pajamas peeped from under one trousers cuff.

"What's this nonsense about a child not being able to go to sleep?" old Doc Dooley demanded. "Why didn't you try a bedroom slipper? They used to work wonders when I was a brat. When that wouldn't work, this would."

He took from his bag a large bottle labeled "Castor Oil".

"Bottle's empty but it has psychological magic. Where is she?"

Doc Dooley has the bedside manner of a police ambulance medico. He stalked into the dimly lighted bedroom brandishing his ominous bottle.

"Now, see here, youngster," he huffed, "I'm going to tell you a bedtime story. Once upon a time there was a bad little girl who wouldn't go to sleep. So her folks called in a doctor and he poured about a quart of castor oil down her. See this bottle?

"Er . . . ulp! . . . M-m-m-m . . . Little touch of fever . . . Stick out your tongue, youngster. M-m-m-m . . . Hand me my stethoscope out of my bag, Zach . . Now just slip the cover down a little . . . Sa-a-ay! What kind of prank is this, Zach Dunne?"

Vivian's strange story came out between Doc Dooley's questions and incredulous grunts.

"This isn't real!" Doc looked at me helplessly. "I'm going to wake up in the morning and realize this is just a dream. But I'll send you a bill just the same!"

"But surely you knew about Neo Shaiman's incubabies," I protested.

"Yes, sure I did, but I always clung to some skepticism. I guess I'm just an old-fashioned pill-pusher, Zach. I didn't believe he could . . . Well, I granted him the ability to create a person artificially, but I didn't believe he could produce one so near perfect as this—this child."

"Do you doubt she's a real incubaby?"

"No-o-o," he admitted reluctantly. "I'm sure she is."

"Then how did he speed up her growth, make her a mature young woman in eight years?" I wanted to know.

"I DON'T know what sort of quackery Shaiman uses," Doc said, "but accelerated development is nothing new. Basal metabolism can be increased . . . Wait, I'll explain it in a different way. Growth, or development—development's a better word—is just a series of chemical actions and reactions. You know that, don't you?"

"If you say so," I agreed.

"All right. These chemical processes—metabolism, as we call it—can be accelerated by injections of thyroxin, an iodine-containing compound of thyroid matter. Glutathione also stimulates development, and so do estrol and estradiol hormones . . ."

"Talk American," Judith cut in.

"Keep your shirt on, Judy," Doc retorted. "Anyway, the medical profession uses these things to step up metabolism to normal when the natural functions are lagging. We don't try to rush nature into doing two years work in one—as that quack Shaiman, seems to be doing. The medical association doesn't recognize him," Doc finished contemptuously.

"Well, what about this oxydyne, Doc?" I asked. "Is it some kind of dope?"

"I don't know what it is. Most likely a name Shaiman coined. I don't think it's a dope. She doesn't appear to be a narcotic case. No, I'm sure of that. The term—oxydyne—suggests oxygen and the last part of it suggests power."

He stopped and rubbed his chin.

"Now this is going to be sort of deep. You'll have to bear with me." He glanced meaningly at Judith. "No act of life, not even the batting of an eye, takes place without destruction of substance. If a muscle contracts, a part of its substance dies. This dead matter must be removed. It is done by the oxygen in the blood. Oxidation, we call it.

"Now, growth itself is a continuous dying and rebuilding of tissues, new matter. This girl, growing twice as fast as a normal person, no doubt, requires much more oxygen. I imagine her oxydyne contains an oxygen concentrate."

"That's all very pretty," Judith interrupted. "But why doesn't Vivian ever sleep?"

Doc Dooley spread his hands in a gesture of impatience.

"I've been waiting for that one, Judy," he grunted. "And I can't answer it. Some scientists have always contended that sleep *causes* nothing, but is merely a result of certain functions and cessation of other functions. Then, if it causes nothing, it would seem unnecessary.

"Maybe Shaiman's out to prove it. I don't know. I've never bothered my

head about sleep, except when some dim-witted client of mine gets me out of bed in the middle of the night." He looked at me acidly.

"Well, if you ask me, she needs it now. Poor thing," Judith said. "Why don't you give her something to put her to sleep?"

"LET me handle the medical end," Doc snapped. "Narcotism isn't restful. It isn't really sleep at all. Anyway, how would she react to a drug I might give a normal person? I'm afraid to do anything. I'm just a Model T doctor, and I'm wary about tinkering with these late models . . ."

"You're a *what?*"

"Skip it. Model T's were before your time," Doc said, closing his bag with an air of finality. "You'd better take her back down to Shaiman's voodoo shop. The gal's not just tired. She's sick. I don't know what to give her."

"If you walk out of here now, Doc Dooley, without doing something for this poor girl, I'll change doctors!" Judith threatened. "I'll never let you . . ."

"I know," Doc said. "You'll never let me operate on you again. Well, Judy, I've opened you up so many times I know your innards by heart, what there is left of them. I can get along without viewing the same scenery again."

Cajolery and threats were futile. Doc Dooley was adamant in his refusal to tamper with what he regarded as a biogenetic freak. He left, advising me again to take Vivian back to the laboratory.

DOC DOOLEY'S decision filled me with dread. Must this helpless, lovable girl be returned to the laboratory to resume her role as Shaiman's human guinea pig? If she went back, Shaiman surely would not give her up. And he would take precautions against another escape.

Of course, I might obtain a court order for her release; but speculation over Doc's ways of thwarting me caused me to shudder.

A brave little whimper added to my dilemma.

"Do something, Zach," Judith demanded hopelessly.

"Tell Danny I want to see him," Vivian pleaded.

I phoned Laird's apartment but he was not at home . . .

I decided to telephone Shaiman anonymously, tell him I had Vivian in my care, explain her restlessness and ask him what I might do for her. I'd appeal to his sense of pity, or threaten him, or anything as a last resort.

I disconnected the viso-lens on my phone before calling. I regretted that this also shut out his image, as I wanted to see this sinister scientist.

He answered immediately; and I felt some gratification in the knowledge that the Dunnes were not alone in sleeplessness over Vivian's estrangement. Shaiman's piping falsetto did not fit the mental picture I had drawn of him.

"I'm not revealing my identity, Dr. Shaiman," I began calmly. "I have Vivian in my care and . . ."

"My baby!" he squeaked. "Where is she? Where are you? Bring her to me!"

"JUST a moment, Dr. Shaiman," I continued. "I have no intention of returning Vivian to your hideous laboratory. I'm calling because she is restless, ill. Please tell me something I can do for her."

"Bring her to me. I'm the only one who knows what to do," he demanded with genuine anxiety.

"You could send some oxydyne to

me by magnetic mail tube, couldn't you? I would have it in ten minutes." I would not give him my address but would receive it at a depot near my home.

"You fool!" he shrieked. "No one knows how to give the oxydyne except me . . . me and my assistants. Bring her . . ."

"You could explain to me how to give it," I persisted.

I suspected he was delaying in order to trace the call. Let him try it. My phone was unlisted and, before he could wade through a lot of official red tape, I could stop the tracer.

"And have you kill her?" he shrilled.

"Listen, Shaiman, you may as well reconcile yourself to her emancipation from your hellish experiments. If you don't tell me what to do for her, I'll call in the best doctors in the city. They'll find out what to do. And, so help me God, I'll have the district attorney start prying into every phial and tube in your stinking workshop before noon today!"

There was a momentary pause and his voice grew more calm.

"You sound like an intelligent man," he said. "Please try to understand this. Compared with a normal person, Vivian's metabolic rate is terrific. The waste matter that results is poison in her system, poison that must be removed rapidly. Your good doctors can't do that, even with their oxygen inspirators.

"Only my oxydyne will eliminate the poison fast enough and she must be here for her oxydyne treatment. Do I make myself clear? Her life depends on it!"

"I'm not sure I believe it," I snapped.

"You've got to believe it, man!" His voice grew excited again. "Poison is accumulating in her system. She'll die . . . my baby . . . After all these years I've spent . . . She's mine . . . You have no right . . . You kidnaper!" he babbled. "She'll die—and you'll be her murderer!"

I grew sick. Weakly I cradled the phone and dragged myself back into Vivian's bedroom, where Judith was holding the girl's hand and rubbing her feverish forehead. Judith looked at me hopefully and made a feeble attempt to smile.

Judith and I had never been blessed with a child. But as I gazed into Vivian's pathetic, drawn face that just a few hours before had been so radiantly beautiful, I knew that if she were my own daughter I would choose death for her rather than return her to Shaiman's sinister experiments. Shaiman's last words dinned in my ears and I shook my head sadly.

Judith guessed my thoughts and tears welled in her eyes.

"I'm taking her back," I affirmed in a dry whisper. And I swore silently to save this innocent girl, legally or extra-legally, even if I had to fight the bitterest battle of my life.

CHAPTER V

Arrested Behavior

NEO SHAIMAN'S laboratory was a windowless third-floor loft in a decrepit, foreboding building. It was located on one of the old, narrow, one-level streets in Manhattan's downtown manufacturing district.

The combination passenger and freight elevator was not running when we reached there in the gray hush-hour between dawn and daylight, so Vivian and I had to walk up.

In spite of her weakened condition, the girl made the climb more easily than I did. Stairs are a real test for old muscles and hardening arteries.

Before I could press the bell, a peep-slot snapped shut and the heavy wooden door swung open. A smocked nurse stood aside as we entered. Shaiman was in a fuming frenzy, with another nurse trying vainly to placate him.

"My baby, my baby!" he cried in his screechy falsetto, bounding forward and embracing Vivian as a child does a lost toy. He babbled mingled expressions of relief and questions about her absence and her condition. She acquiesced languidly to his fondling and seemed mildly glad to see him.

Shaiman was a small, flaccid man of indeterminate age, no taller than Vivian, and slightly paunchy. His rough head and face were wholly destitute of hair, giving him a moonlike appearance except for his black gimlet eyes. Even eyebrows and eyelashes were lacking. His small teeth were widely spaced, as if each shunned the other. His skin was an unwholesome, shuddery white, like the belly of a deep-sea fish.

"Quick, prepare her bath," he commanded one of the nurses. Then to the other nurse, "Give her Sedative 2-B with her oxydyne and then call me." He led Vivian toward a door.

She sprang away from him and ran back to me.

"You'll tell Danny I had to come back for my oxydyne?" she pleaded. "Please come back and bring him."

Shaiman scowled. I promised and she went obediently with the nurses.

Having ignored me up to this point, the scientist now whirled on me angrily.

"And now," he hissed, his tongue flicking out like a cobra's, "will you kindly explain this—this abduction?"

"I didn't come here to make explanations. I came to demand them," I gritted. "But I know nothing of an abduction. If there was one, I suppose I'm an accessory after the fact. She came to my office yesterday afternoon, willingly enough, and told me she wanted to get married . . ."

"Married?" he piped. "Why, she doesn't . . . you're crazy . . . she doesn't even know the meaning of the word!"

"I found that out; I was amazed. A full-grown young woman who had never been told about marriage. Nevertheless, she came to me and told me she wanted to marry Daniel Laird."

"Laird . . . that Laird! I let her go out with him. I wanted to check her emotional reactions, to see if she would react as a normal girl would in the company of a handsome young man. And the next day he came back and lured her away. Kidnaped her! And you . . . you . . ."

"STOP sputtering, Shaiman," I cut in harshly. "If you've any accusations to make, make them to the district attorney. It won't get you anywhere. Laird is an impeccable young man, and popular. I have some standing, myself. So your charges may backfire."

"Who are you?"

"E. Zachary Dunne, attorney," I said. "Just a puttering old barrister who can't quite make up his mind to retire. I have not figured in an important case in years, but I keep in touch with things. If I whisper a word into the district attorney's ear he will start probing into your hellish business so quick it'll make your head swim!"

Shaiman's pallid face seemed to grow a shade whiter.

"There's nothing wrong with my work," he protested.

"Oh, no?" I prodded. "I'll admit we're living in an age of rapid scientific achievements. Society is science-conscious. New inventions and discoveries have come so fast in the last few decades, people are beginning to accept them as a matter of course. But I'm

not so sure society is ready to accept your test-tube creation of living, flesh-and-blood persons."

"Accept it? Why, I've been carrying on for ten years," he reminded me. "I haven't been molested."

"Carrying on quietly, yes. But your —er—medical practice has never been made into an issue for public sanction, or disapproval. News of your discovery came at a time when our country was threatened with revolution. A politically frenzied people, inflamed by press and radio, had no time for seemingly fantastic claims of an obscure biochemist. Afterward, for your own reasons, I suppose you saw fit not to publicize your secret."

"I have not operated in secrecy," Shaiman declared.

"Call it modest retirement, if you prefer; that's not the point," I said. "This is an election year. There has been a dearth of publicity for the district attorney. If he makes a case against you, the newspapers will eat it up; so will the radio.

"The medical association will denounce you. The pulpit will flay you as a meddler into the affairs of God. People, always quick to distrust what they cannot understand, will condemn you."

"What wrong have I done?" he cried defensively.

"I don't know. That's what I intend to find out. For what purposes are you creating these incubabies, Shaiman? What do you intend doing with Vivian? Whatever it is, I won't let you," I growled.

"Purposes?" he echoed. "Why, man, my incubabies still are children! Vivian is the oldest and she's not nine years old."

"Not according to the calendar," I admitted. "But biologically, a young woman. Now get this, Doctor. I'm no self-appointed defender of public morals and I don't care what you're doing with your incubabies, except as far as that girl is concerned. I'm going to see that no harm comes to her. I mean it."

"You like my little Vivian?" There was pride in his voice.

"I do. I've known her less than a day, yet she has crept right into my heart. I can understand how young Laird fell in love with her."

A LOOK of disgust crept into his face.

"How did you happen to use Laird to test her emotions?" I asked. "And what did your little experiment reveal to you?" The last was a taunt I could not resist.

"I'm making an experiment for him, an experiment in plastics. He is a handsome young man and I believed he would suit my purpose," Shaiman replied, becoming the scientist again.

"We concealed a cardiagraph under her clothing. Laird knew nothing about it, and she thought nothing about it. Experiments are routine with her. When we examined the tape later we learned she had reacted normally." He shook his glossy head. "Too normally."

He reached into a desk drawer and pulled out a narrow ribbon of celluloid. He handed it to me. His telephone rang and I studied the tape while he talked. The track of the style ran a fairly even course down the center of the tape, with an occasional side-step.

Then I noticed where the style had veered far off course. And after yawing wildly for a short space it had skittered all the way off the margin. I chuckled. I knew the meaning of those two violent disturbances recorded by the human seismograph.

A nurse entered as the scientist finished talking and told him Vivian had taken her oxydyne.

"Excuse me, please," he said to me. Then, "No, come with me. I want to show you something."

He led me back to a small, glassed-in apartment where Vivian was reclining in an adjustable chair, listening to soft, soothing music. She was wearing a long house robe or gown. She looked much refreshed. When she saw us she stopped the music and skipped over to us, speaking to me first.

"Did you tell him?" she asked eagerly. "Why didn't you bring him?"

Shaiman scowled.

"I haven't been away from here," I explained. "How do you feel, dear?"

"Much better. You'll bring him soon?"

"Get your rest, Vivian," Shaiman said impatiently. "I'm showing Mr. Dunne around the lab." He called her nurse, gave some instructions in a low tone and led me away.

"You seemed anxious to get me away from her," I accused.

"She needs her rest. She has had too much excitement already," he replied. "I just wanted to show you she receives the best of care here."

"You didn't show me much," I grunted. "But she certainly doesn't look like the sick girl I returned to you half an hour ago. She's as fresh as if she'd had a good night's sleep. What is the meaning of her not sleeping? Why doesn't she ever sleep? How can she get along without it?"

A SMILE of condescension flickered at the corners of the scientist's lips.

"Sleep, as it is generally known, is the greatest impediment of an otherwise fairly well streamlined civilization. We spend eight hours a day in sleep. Think of it, one-third of our lives lost in unconsciousness! You're past sixty, I judge. Then at least twenty years of your life have been lost."

"But people can't get along without it," I declared.

"Can't they? Vivian does; so do some of my other incubabies," Shaiman retorted. "Sleep is a deep-rooted habit, that's all. It is not essential. It dates back before the discovery of fire. When darkness came at night our prehistoric forefathers, unable to find their way around, holed up in a cave and slept. They formed the habit of resting their bodies and minds concurrently. We have never broken the habit . . ."

"But . . ."

"Wait! Sleep is merely simultaneous resting of the conscious mind along with certain organs. That is not necessary. Rest is necessary, yes. But I have found no reason, beyond habit, that calls for the brain and other organs to rest at the same time."

"You mean they can rest in relays, or shifts?"

"Exactly," he said. "I have a planned routine for Vivian that gives every part of her plenty of rest. Her mind is resting now as she listens to soothing music. She is conscious but her mind is in a passive state, not active."

There were other questions about sleep that puzzled me, but I decided to let my mental molars first gnaw a while on what he already had given me.

"And what is this oxydyne elixir?" I asked.

"It is my secret formula." Shaiman seemed about to let it go at that, then went on. "I told you earlier over the telephone enough for you to know that oxygen is its principal ingredient. I have nothing to lose in telling you still a little more."

Vivian, dressed in a gym suit, stepped out of her little apartment down the hall, waved to us and trotted around a corner.

"All people—all animals and plants, in fact—grow in rhythms, or cycles,"

Dr. Shaiman continued. "They grow for a span, then growth ceases for a while, then growth resumes. Over and over again. Growth is not simply expansion, like the inflation of a balloon. It is a dying of matter and formation of new matter—metabolism is the scientific term.

"The dead matter becomes a poison which must be eliminated. That is done by oxidation. The poison is carried away by oxygen in the blood. Normal persons receive enough oxygen through their lungs for this purpose."

VIVIAN jogged back around the corner, marked time a few beats, and trotted away again.

"Vivian, there, is growing continuously. That is why she is practically mature at the age of nine. But she cannot absorb enough oxygen through the lungs for adequate oxidation. Even oxygen inhalators could not aid sufficiently because, after all, the lungs will absorb just so much.

"So I had to devise another way of giving the oxygen. I mix it with artificial haemoglobin—haemoglobin is the oxygen-carrying agent in the blood—and give the mixture intravenously."

"No!"

"Yes, I inject it into the veins," he repeated. "And I can do this without leaving hypodermic pit marks. I will have to continue these injections until I let Vivian's metabolic rate drop down to normal."

"You can do that?" I gasped. "I mean, *let* her be normal?"

"And why not?" There was that flicker of a smile again. "I'll simply stop giving her a development accelerator, which is just a slight improvement over the thyroxin your doctors have used for many years. Yes, in just a few weeks now, a couple of months, I will let her become normal in that respect."

He started back toward his office.

"You were going to show me around the laboratory," I reminded him.

"That's what I said before Vivian," he said, looking at me queerly. "You admit you came here spying on me, yet you expect me to show you everything cheerfully. But all right. Maybe you will change your malicious ideas about my work. I have shown others; I will show you."

CHAPTER VI

The Scream

I WAS beginning to wonder if my suspicions of Neo Shaiman were well-founded.

We turned back and started down the long corridor. As we passed a door a hoarse, blood-chilling scream stopped me in my tracks.

"What was that?" I demanded.

"It was nothing," he said. "Come this way."

"But there was terror in that scream," I protested.

"Just one of my patients having a nightmare."

I followed him, my suspicions returning. He opened a door and pointed to what appeared to be a small glass showcase on a table. There were a dozen or more such cases in the room.

"Here is where I create my babies," he said. "These are incubators."

In the center of the case was a shapeless pouch that seemed to be made of cloudy cellophane. I studied it silently.

"What's that thing that looks like dirty macaroni, leading from the pouch to that glass bulb at the end of the case?" I asked.

"The foetus gets its nutrition through it," he explained. "I suppose you would call it the navel cord."

"Oh."

"That glass bulb is where we put all

the chemicals necessary for the baby to develop," Shaiman continued.

"Chemicals?" I suppose my voice registered surprise.

"The pre-digested food. Calcium, iron, lime, oxygen, all of our elements are chemicals. All matter is chemical."

"But what about its blood, Doctor, where does it get its blood?"

"It makes its own, just as a natural baby does," he said.

"A natural baby makes its own blood?" I marveled, thinking of the foetus before birth.

"That isn't a secret. All doctors know it." He seemed amused. "You think a child inherits its father's and mother's blood? Well, it doesn't. I don't deny there's such a thing as heredity, but it is not through the blood. Not one drop of a parent's blood—either parent—ever flows in a child's veins."

I glanced at the only other thing in the incubator, a thermostat which kept the temperature at body heat.

"Is that all there is to it?" I asked in disappointment.

"What were you expecting to see?" he laughed.

"I don't quite know," I admitted. "Maybe that, or maybe something like an assembly line in a doll factory, where arms are fastened on here, legs there, and so on. Have you any other—er—babies in advanced stages of development?"

"You wouldn't see any more than you've already seen," Shaiman said. "But wait. Yes, I have. There's one ready for what you might call birth."

HE led me into another room where there was a lone incubator. It was the same as the others but the membraneous pouch was stretched tight over a well-formed baby. I was reminded of a contortionist I once saw crammed into a small trunk.

"Looks like it's going to be an Indian," I observed.

"Far from it. They're all red at first," he declared. "By rights, this fellow will be fair-complexioned, blue-eyed and red-headed, just like his famous mother."

"Mother? I thought . . ."

"Some of my babies are purely creatures of science. Vivian is one. Some are parthenogenetic, which means fatherless. They are the results of artificial breeding.* But this baby was conceived naturally, having a real father and a real mother.

"The mother is too busy being a great actress to have a baby naturally, so we employed special means—and there it is. I'll present the new-born baby to her in a day or two. That is an important part of my work — being a 'stand-in' to assume the dangerous and inconvenient part in the rôle of motherhood. The baby will be bottle-fed, of course but most of them here are now anyway."

"Have you any other older babies?"

He led me into a nursery where there were several children.

* This, to us, would mean that much-publicized method of creating babies in a test-tube. Dr. Shaiman is obviously creating infant life in three separate ways: synthetically, through chemicals; parthenogenetically, through artificial fertilization, and by incubation of the life processes.

For many years scientists have striven to recreate the miracle of birth. A certain amount of success has attended a few individual efforts, where amoeba-like forms were artificially developed. These plasms showed many evidences of actual life, except one: they were incapable of reproduction, the acid scientific test.

However, it is only through such experimentation that science hopes eventually to discover the miracle of life. At the present time, these experiments are not going ahead very generally, science being more concerned at the moment with biochemistry.

The most famous living experimentalist on the development of living tissue is Dr. Alexis Carrel, of the Rockefeller Institute for Medical Research. His development of new techniques for the cultivation of tissues *in vitro*—"in glass"—is recognized as foremost in its field.—Ed.

"These are twins," he said. He pointed to a girl who seemed about ten, putting shoes on her baby brother.

"They're what?" I gasped.

"They aren't really twins," he admitted. "We took them from their incubators the same day, so we call them twins. The girl's development has been accelerated, the boy's is normal. They are five years old."

From somewhere in the laboratory came a repetition of the spine-tingling scream that had startled me earlier. It was the deep scream of a man. A man's scream isn't nice to hear.

"There it is again!" I shuddered. "There's something wrong here, Shaiman. What is it?"

Unperturbed, he nodded toward a door. "Come with me."

We went into a small room that smelled of chemicals. Shaiman paused before a door and placed his finger to his lips in a signal for silence. Tiptoeing, he led me into pitch darkness.

I was tempted to turn back. I forced myself on. As my eyes grew accustomed to the darkness, I saw the silhouette of a man seated in front of a large glass panel which glowed dully. The panel was set in the wall of a smaller room. Nearer, I saw the panel was a fluoroscope in which I could distinguish the skeleton of a large person tossing restlessly on a bed.

"How has he slept?" Dr. Shaiman whispered.

"All right for nearly two hours," his assistant replied. "Had a nightmare at 3:35 that lasted two minutes. Another started just a few minutes ago. He's coming out of it."

"He looks like a skeleton wearing a black sarong," I commented.

"THE 'sarong' is made of fabricated lead. It keeps out the rays," Shaiman explained. "I've taken him off his rest routine and am trying to teach him to sleep. He doesn't take to it kindly. It's just an experiment."

Shaiman felt along the wall and snapped on a dim light in the inner room. He rapped lightly on the door. Through the glass wall I saw the man raise himself on the bed. Shaiman knocked again and snapped on a brighter light. We entered. A huge, hairy, swarthy monstrosity tumbled out of bed and stood blinking drowsily at us with small apelike eyes.

"How did you sleep, Bruno?" the doctor asked.

"It was terrible!" Bruno declared in a raucous basso that seemed to have been ripped from deep in his stomach. "Please don't make me sleep any more, Dr. Shaiman. I don't like it." Although hoarse, the plea was like a childish whimper.

Surely this could not be an incubaby, I thought. No accelerated development could, within ten years, produce a six-and-a-half foot, hairy giant with beard stubble that made his face a bluish black.

"Nonsense, Bruno," Shaiman chided him. "You'll get used to it and you won't see awful things. What did you dream this morning?"

"I had a girl, a beautiful girl, but some men took her away from me. I killed some of them," he boomed, drawing his muscular figure into a fighting crouch. Then he relaxed and wagged his head sadly. "But there were too many of them."

"You had two dreams, Bruno. What was the other?"

"It was the same. It's always the same since you've been making me sleep. I always have a pretty girl but something or someone takes her away from me. I don't like to sleep."

"Those dreams will cease after you get accustomed to sleeping," the doctor

soothed. "Go ahead like a good boy and learn to sleep. Then I'll let you play with Vivian. Remember Vivian, the girl I pointed out to you recently?"

Bruno's small eyes lighted and he inhaled audibly. A tremor traveled over his big body and he spoke excitedly.

"I'll try, Dr. Shaiman, I'll try hard. I'll go right back to sleep now, if you want me to."

"No, not now. You have your studying to do."

CHAPTER VII

Bride of the Beast

BACK in his office, Dr. Shaiman explained that Bruno was his second oldest purely artificial incubaby. He had started producing Bruno soon after Vivian became a thriving infant. Bruno now was almost eight years old.

"Incredible!" I ejaculated. "I've never seen a full-grown man as hairy as he. His wiry beard, his deep voice . . . what makes him so dark?"

"After Vivian turned out to be such a fair, pretty baby, I supposed all of my babies would be the same. But Bruno is swarthy. Control of pigmentation was a factor I had overlooked in both cases. I was simply fortunate with Vivian.

"I was too eager to produce a male to consider any other factor," the doctor continued. "Since Dr. Amos Sherman produced a kitten by artificial conception back in 1939, all parthenogenetic offspring had been females. The element which determines sex — we know it as Y-chromosome—must be supplied by the male parent. But when there is no male parent, or as in Vivian's case no parent at all, the offspring inevitably would be female."

"Listen, Doctor," I interrupted. "The way you talk, the world could get along without us men."

"Biologically, yes," he said impatiently. "But I wanted my second incubaby to be a male. I could have obtained the natural Y-chromosome, of course, but that wouldn't have been exactly cricket. So I infused a bit of testosterone, which strengthens male characteristics in a person. I hoped its influence would be strong enough to determine sex. It worked.

"I'm not revealing a secret. Physicians have used testosterone for years. My application of it may not have been strictly unique. It could have been used, probably, to predetermine the sex of natural babies. I may have used an overdose when I created Bruno. He seems to have too much masculine vigor. However, I can temper that after I have made the important experiment."

"What is that?" I asked.

"With Vivian," he replied.

"What?" I bellowed. "Surely you don't mean . . ."

"Of course I will," he declared. "How else could I know whether my two artificial beings can reproduce normally? I'm simply waiting a few months for Bruno to mature more."

"You will not!" I barked. "I'll get a writ of habeas corpus and take her away from you. I'll have you jailed, you inhuman fiend! I'll . . ."

Anger surged into his pasty face.

"Stop this pettifoggery!" he choked. "I'll not have you interfering with my work. Get out!"

I was never a pugnacious man, yet, even at my age, my fingers itched for the feel of his throat. I moved toward him.

SHAIMAN snatched open a desk drawer and whipped out a pistol.

"Get back, you meddling shyster!" he shrieked, leveling the pistol a foot from my stomach. Shyster, indeed! "Do you think I'm going to let you hinder my experiments?"

There was no doubt in my mind that Shaiman would pull the trigger. In his own warped brain he was defending his science. Even according to our laws, he could be justified in killing me. I was a trespasser. Slowly I backed toward the door.

"Open it and get out," he ordered.

There was nothing else to do. The door slammed and I stood outside, wondering what to do next. I could call the police, but they could not raid a man's business simply on my charge that he was planning something wrong.

Perhaps I had better wait until I could cool off and think things out clearly. Vivian apparently was in no immediate danger. Shaiman had said he wanted to wait until Bruno was a little older.

The peep-slot opened and Shaiman's eyes glittered through it.

"Go away and leave me alone," he hissed. "Your laws can't touch me, Mr. Dunne. I can do as I please with my children. Legally they don't exist. If you annoy me, I could even destroy them. Yes, I created them! I can destroy them!"

The slot closed with a snap.

I WENT to a quiet restaurant and dawdled over breakfast and a morning paper for an hour. Then I went to my office. It looked strange. Patricia had not yet showed up, of course. There was no mail on my desk.

The long leather settee looked inviting after my harassing night. Patricia woke me when she arrived.

Sketchily, I told her of my trying night with the sleepless Vivian; about the naive child-woman's walking innocently out of the bathroom, utterly naked, to confront me and my wife and ask for her oxydyne; about the accelerated development that had made a beautiful woman of her in nine years.

Patricia's incredulity changed to speechless horror as I told about the monstrous Bruno and Dr. Shaiman's hideous plan.

"But I'll stop it!" I vowed. "Somehow."

I was not sure what I could do. The police had no right in the case until after the crime had been committed. I shuddered. I probably could take the girl away from Shaiman with a writ of habeas corpus. But what good would that do? She could not live without her vital oxydyne, and Shaiman alone knew its secret formula.

I could get a court order restraining the man's further experiments with Vivian. But I had little hope this cold scientist would heed such an injunction.

My spirits were low indeed. I went into my lavatory, took a half drink of whiskey and dashed cold water in my face. I was feeling better when Daniel Laird arrived a little later.

He bounded through the door and swept the room with a glance.

"Where is she?" His face showed disappointment.

"Er—sit down, Dan," I stalled. "I couldn't have her here right now. I—er—there's something to explain."

HIS disappointment changed to anxiety but he waited for me to continue.

"Dan, not as a lawyer but as a friend of your father," I said, "I want to ask what you know about Vivian. Do you really want to . . ."

"Don't torture me, Mr. Dunne," he demanded. "What happened to her?"

"Calm yourself. Nothing harmful," I assured him. I could not bring myself to tell him immediately about the experiment Dr. Shaiman planned. "I had to return her to the laboratory."

"Wh-a-a-t?" he bleated.

"Take it easy now, son," I soothed.

"Away from the laboratory Vivian was like a fish out of water. You knew she was an incubaby?"

"Yes, but that doesn't matter. I want . . ."

"But do you know how old she is, Dan?"

"What does that matter? She's young enough for me."

"Too young, possibly," I declared solemnly. "She is just eight years old."

"This is no time for joking, Mr. Dunne," Laird blurted, leaping to his feet. Mentally I compared his trim, athletic five feet and ten inches, crinkly dark hair and earnest blue eyes with the hideous Bruno. Again I shuddered.

"Listen, Dan, do you remember when Dr. Shaiman discovered his secret for creating incubabies?"

He frowned in thought for a moment. "No, not exactly."

"It was the year a revolution in this country was narrowly averted," I said significantly.

His brow furrowed. "Let's see. That was my second year at college. The whole varsity aero-polo squadron stood ready to enlist in the government service." He was counting back on his fingers. "Good Lord!" he gasped, slumping back into his chair. "Not even ten years."

"Right," I said. "Vivian is not quite nine years old."

"But, Mr. Dunne, she's grown. I—I kissed her," he declared, reddening. Then tenderly, "Twice. And she kissed me, too."

"I know. She told me, and I saw cardiagraphic proof of it," I announced. "Biologically, she is as old as she seemed to you. She is the result of accelerated development. But, according to our calendar, she is not yet nine."

He stared at me in bewilderment. I told him everything that had occurred in my home the night before and all that I had learned that morning in the laboratory, excepting, of course, any mention of Bruno.

Laird continued to stare in helpless amazement.

"You just met her two days ago, Dan," I continued. "Is your feeling merely protective, or . . ."

MY phone buzzer interrupted me and Vivian's face, her eyes wild with terror, flashed in the photo-dial.

"Help!" she screamed. "Bring . . ."

I dropped the phone and followed Laird, who already had bolted out the door.

"Police! Shaiman's laboratory!" I yelled at Patricia as I ran through the outer office.

As Laird and I leaped into a taxycle, I showed the driver my card.

"Life or death, son. Step on it! I'll keep you out of trouble."

The driver hesitated a moment, then gave his motor the gun. He increased his speed as I urged him on.

"Ignore traffic lights," I implored, flashing a greenback in front of his face.

He raced to beat a changing light at the next corner but was a split second late. He swerved wildly to miss the tide of traffic and whizzed on, blatting a tattoo on his horn. At the next corner I threw my arm in front of my face and held my breath, as he plunged into a seemingly unbroken stream of cross-street traffic.

He skidded dizzily, lurched again, sideswiped another taxycle, but kept his wheels under him and sped on down the avenue. How that man could drive!

Lights were with us at the next corner and we raced through at increasing speed. There was a shrill traffic whistle behind us, and the driver glanced anxiously into his mirror. A traffic officer had commandeered another taxycle and was giving chase.

"Let him overtake us," I ordered.

The officer drew alongside.

"Where's the fire?" he brayed.

"Lead us!" I shouted. "It's life or death!"

He hesitated. "It better be," he barked. Then to his driver, "Step on it!"

Laird had not spoken a word. He gripped the sides of his seat grimly as we sped southward, the two horns and the officer's whistle shrieking a warning. I felt guilty and sick as I glanced out of the corner of my eye at his anxious face. To me, Vivian's frantic phone call meant just one thing. Shaiman, fearing I might take immediate legal steps to interfere, had decided not to delay his diabolic experiment.

Experiments were routine with Vivian. Her life was just one unending series of experiments under Shaiman's observations. She had come to accept them as we accept the weather. And yet, she had balked at this, her creator's supreme experiment.

Shaiman had shaped her education so that nothing contrary to his purposes was included in her curriculum; yet today she must have sensed undeniable wrong in his instructions. She had a conscience—a soul! Neo Shaiman had created her with his cold laboratory magic, but the Great Creator had breathed His undying spirit into her. If she could just resist until we got there . . .

"More speed!" I yelled at the driver. He gave me an exasperated look. His motor was wide open.

"Left . . . next corner!" Laird bellowed. "Then stop."

TIRES screeched as we skidded around the corner and braked to the curb. Our escorting traffic officer sped straight ahead in his cycle. Laird leaped to the sidewalk and sprinted into the building where the laboratory was located.

"Wait on the corner for that officer to turn back," I told the driver. "Tell him to hurry to Shaiman's laboratory in this building. Third floor."

Police already should be there, I thought, if Patricia understood my parting message. I did not wait for the slow elevator but labored up the steps as fast as my creaking old legs would carry me.

Laird was pounding futilely on the heavy laboratory door. I remembered seeing an open door to a janitor's room on the second floor and dashed back, hoping to find something heavy with which to batter down the laboratory door. I found a stepladder and hauled it upstairs. We used it as a battering ram and broke the heavy door's lock with the second thrust.

I tripped and sprawled with the ladder on top of me as young Laird burst into the office. Shaiman was flattened against a wall, gripping his pistol unsteadily. He was too terrified to pull the trigger. He dropped the pistol and tried to run. Laird seized him by the lapels of his coat and jerked him clear of the floor.

"Where is she?" he growled.

His question was answered by Vivian's scream somewhere in the rear of the laboratory. It was shrill and filled with terror. Laird flung the doctor aside and charged toward the back of the building.

"No, you don't!" I shouted as Shaiman tried to retrieve his pistol.

I had untangled myself from the ladder, and I reached him in a limping leap before he could pick the gun up. We went down in a grunting, gasping huddle of unresilient bones. I succeeded in grabbing the weapon, and I displayed commendable restraint in my excitement by tapping him lightly on

his glistening head. He slumped down peacefully.

Other incubabies, frightened by the disturbance, set up their wails and the place became a bedlam. I could not distinguish Vivian's screams above the others. I limped to her tiny apartment. She was not there, but an overturned chair and one dainty slipper in the middle of the floor told me she had fled from the room in panic.

"Vivian! Vivian! Danny!" I shouted at the top of my lungs, but I could not make myself heard above the mad caterwauls throughout the place.

A terrified nurse crept cautiously out of one of the incubator rooms, caught a glimpse of the pistol in my hand and added her voice to the general cacophony as she dashed toward the front office.

I TRIED to find the door leading toward Bruno's apartment, but the place was a confusing labyrinth of corridors and doorways. Suddenly a hoarse bellow of rage led me to the end of a hallway. I plunged through a door, just in time to see Laird pick himself up from the floor and stagger weakly toward the towering Bruno.

The enraged giant swept him into a hairy embrace and squeezed him until Laird went limp with a tortured grunt. Bruno dashed him to the floor again, then bared his teeth in an animal snarl as he started toward me. I aimed at his chest and fired. He merely jerked, as if seized by a violent hiccup, and continued toward me.

I began shooting as fast as I could squeeze the trigger. All lights in the place went out. I continued to shoot until I heard the hammer fall with a sickening click. Then I stood frozen to my tracks in the darkness, waiting for the brute to seize me.

I waited interminably, it seemed, before I heard a heavy thud in front of me . . .

I could hear policemen now at the front of the laboratory. Their flashlights split the darkness like groping fingers.

"Back here!" I managed weakly.

An officer hurried down the hall, shoving the cringing Neo Shaiman in front of him. A flashlight found Bruno, who was seated on the floor, arms hugging his bleeding stomach and his face twisted in pain.

"My baby!" Shaiman cried, stumbling to Bruno and cradling the shaggy head in his arms.

"Quiet, stop that bawling!" a lusty Irish voice bellowed at the incubabies, and, strangely, the wailing subsided throughout the place. Somebody located the master switch and turned on the lights.

Vivian, who had emerged from a corner where she had been crouching in terror, was sitting on the floor with Dan Laird's head in her lap. She was dabbing at his bleeding face with the hem of her tattered cotton robe.

"Danny, my Danny," she cooed softly. Laird merely blinked foggily.

"Always . . . same dream," Bruno groaned painfully through blood-flecked lips. "I . . . have pretty girl . . . but . . . someone . . . takes . . ."

His huge grotesque body jerked convulsively, then went limp.

One policeman took off his cap and crossed himself. No one spoke. Shaiman sat there with tears streaming down his cheeks as he held Bruno's lifeless head in his arms.

A thin, muffled wail sounded elsewhere in the laboratory. Shaiman cocked his head attentively and blinked, making me think of a tearful little bird. Gently he let Bruno's head rest on the floor. The wail sounded again, more urgent.

"Why he . . . he must have ruptured his pouch!" Shaiman cried, hastening out of the room.

In a few moments the scientist returned with a red, wrinkled, squirmy, gurgling bundle of humanity in his arms.

CHAPTER VIII

All's Well

THAT should be the end of my narrative. In one eventful day a Shaiman incubaby had breathed its first; another breathed its last; another was married.

Before the sun set that day a judge whom I knew well signed an adoption decree, making Vivian my daughter and, of course, giving her a last name. We flew to a state that still permitted quick marriages and Vivian became Mrs. Daniel Laird . . .

But there is still another episode.

Dr. Neo Shaiman loved his incubabies in his queer way, and he was especially fond of his beautiful blond "first child". But he quickly reconciled himself to the loss of Vivian and did his utmost to make her comfortable and happy. He furnished oxydyne and assigned his most capable nurse to attend her until her metabolic rate dropped to normal.

He refused to accept money for the oxydyne or even for the nurse's salary, probably regarding this as his wedding present.

The honeymoon, of course, was an unusual one—husband, wife and nurse. Vivian was "weaned" from her oxydyne without difficulty, but readjusting her rest routine seemed an impossible task. She gave up trying.

She still never sleeps. In fact, watching her retain her vivacity and grow more and more beautiful has led Dan Laird to try the sleepless rest routine himself. I heard later that, except when pressing business disrupts his schedule, he is able to go for days without sleep. Some of their friends, too, are trying it with encouraging results . . .

With Bruno out of the way (I must confess I have never felt any deep qualms about his death) and with Vivian safely married to a fine young man, I saw no reason to swear out a warrant against Dr. Shaiman, if indeed I could have found valid charges. The police had assumed the whole trouble was a mad monster running amuck. I let it go at that.

Shaiman seemed to appreciate my attitude and became quite friendly. Several times he invited me to witness some amazing phenomenon. About a year after that eventful day in the laboratory, I received a telephone call from him just as I was entering my office. From his excited babbling, I gathered he wanted me to come to his place at once. Wondering what new scientific magic he had wrought, I hurried there without even waiting to glance at my mail.

I found him in one of his incubator rooms, strutting proudly as he chattered at a nurse.

"Read it!" he squeaked, thrusting a telegram at me.

> Seven-pound boy born naturally last night. Vivian and baby doing nicely. Birth certificate reads Daniel Neo Zachary Laird.
> —Daniel Laird.

"Vivian isn't going to let her baby suffer from a scarcity of names, as she herself did," I chuckled.

"Born naturally," Shaiman cackled triumphantly. "And I'm a grandfather!"

"You?" I snorted. "*I'm* the grandfather. Didn't I adopt her legally?"

★ ★ ★

FIFTH COLUMN OF MARS
(Continued from page 27)

ize the significance of what had happened. Then it came home to him, with a savage, exultant thrust. He had won. *Won!* Thordon and Carson were both out, weaponless, powerless.

"We licked 'em, Gurnwald!" he shouted. And the shout died in his throat.

For through the door on the opposite side of the room a line of guards was charging. Standing beside the door—was Betty Phillips! She had admitted these guards to the laboratory. She had called them.

He hadn't won! He didn't have a chance. Weaponless, with only his fists to fight ten or fifteen brawny guards armed with swords! A choked curse burst from John Keenan's lips.

He had lost. Again Betty had betrayed him. The girl he loved had called the guards!

Keenan squared off to meet them. Fists against cold steel. He would go down like a stuck pig. But after what Betty had done, he didn't care.

He saw Gurnwald move. The Martian was not dead, then. Even that did not matter. It would not be long before Gurnwald *was* dead.

It was not until Gurnwald, crawling painfully across the room, seized the light projector unit Thordon had dropped, and turned it full force on the first guard in line, that Keenan realized that he himself had a chance to live, after all.

Lights swirled around the guard. The Martian froze. He toppled to the floor. Gurnwald, using the light projector like a fire hose, turned it on the line of guards.

"Give 'em hell, Gurnwald!" Keenan roared. "I'll be with you in a second."

He grabbed the pistol Carson had dropped. It was empty, but a quick search of the pockets of the enemy agent revealed two clips of cartridges. He shoved one clip into the pistol.

The gun thundered. A charging guard sprawled and went down. The gun roared again. Another guard died.

Thordon's men might have faced the weapon Gurnwald was using. They knew what it was. It might kill, but usually it merely rendered a person unconscious for several days.

THE pistol was another thing entirely. They had never seen a pistol. Nor had they ever heard one. The roar of the explosion shattered their nerves. They broke. They fled. Betty saw them start to run. She tried to rally them, giving an exhibition of desperate courage that in other circumstances Keenan would have admired. But she failed. And Keenan grabbed her.

"I told you that you had a payoff coming," he said bitterly. "Much as I hate it, I'll see that you stand trial for treason."

"Let go of me!" she jeered. Then she went limp in his arms. "Why don't you give up?" she whispered. "It's the only chance you've got to save your life."

"Like hell it is!"

"But you're surrounded. You'll never get out of this laboratory alive. There are hundreds of guards outside. They'll be back."

"Not while I've got their bosses, they won't be back!" Keenan growled.

"But you haven't got their bosses. That's why I'm trying to ask you to give yourself up. You haven't got Thordon and Carson. While you were fighting the guards—they escaped."

"What?" Keenan whirled.

Carson and Thordon were gone. Apparently one had recovered from the effect of the blow and had dragged the

other from the room. With the two conspirators outside to organize the fleeing guards, John Keenan was trapped.

Gurnwald staggered to his feet. "Nice fight," his feeble thought came. "Too bad—we lost."

He fell forward, dead.

"We haven't lost — yet!" Keenan gritted.

"Wh—what are you going to do?" Betty quavered, as he slammed and locked all doors leading to the room.

He gestured toward the projector in the middle of the laboratory.

"You see that thing? It brought us here. I'm going to use it to take us back!"

CHAPTER VI

The Final Blow

HEAVY blows were already sounding on the doors of the laboratory when Keenan mounted the steps to the projector. Light was blazing from it in a steady stream. He had found a map in the room, a map of the U.S.A., and had discovered that the projector was already focused. Everything was in readiness. Betty Phillips, her arms and legs hurriedly tied, was in his arms. He was taking no further chances with her.

Perspiration stood in beads on his forehead. He looked at the light, swirling in a giant stream upward. He hated to face that column of cold, engulfing radiation again. He hated to face the space across which it would hurl him. But most of all he wondered if he had miscalculated. If he had—

Blows sounded again on the door. He stepped into the light, Betty Phillips still squirming in his arms.

It caught him, froze him, whisked him upward. He did not try to struggle against it. And this time he found he retained some small measure of consciousness.

Out across space they raced. The darkness of the void was all about them. Ahead was a blacker object, a great globe, growing so rapidly that Keenan could see it increase in size.

That globe was Earth, as seen from the dark side.

Keenan's mind was a turmoil of mad suspense. Had he miscalculated? Had he made one single mistake? One mistake, and everything he had fought for would be lost!

The Earth rushed at him. Then the rush slowed.

The telescopic light deposited them in a court between two buildings of one of the largest powder manufacturing plants in the United States. John Keenan felt the ground under his feet again.

The light released him. It faded out. And as it faded, there came, from some unguessed distance, a thumping thud. It was not repeated.

John Keenan sighed. He looked upward. There in the night-time sky he saw — the red planet of Mars. It gleamed like a huge eye in the heavens, a watching, waiting eye. Keenan collapsed.

SURPRISED GUARDS—and there were guards at every industrial plant in the country, after all the mysterious explosions that had taken place—found them. Men with fixed bayonets surrounded them.

"Who are you?" a lieutenant barked. "Where did you come from? What was that light? What's this all about? Are you trying to blow up this plant? Speak up, and be damned fast about it!"

"I'm John Keenan," the Federal agent answered. "I want you to take this woman into custody. She's charged

with treason. I'm John Keenan, of the F.B.I. Here's my badge." He fumbled for the tiny golden badge of the Federal Bureau of Investigation.

He didn't find it. It was gone!

"I'm Betty Phillips," a girl's voice spoke. "I'm an agent for Military Intelligence in the War Department. Here's my badge. I want you to arrest this man"—here her voice broke—"for impersonating a Federal officer—and for treason."

She was crying when she finished speaking. And John Keenan was rising to his feet, incredulous.

"What!" he shouted. "Betty! Is that the truth? Are you really a Military Intelligence operative?"

"Yes," the girl wailed.

KEENAN'S shout was an exultant roar. "And it's just my luck!" Betty Phillips — an agent for Uncle Sam! That explained at least the shadows in her background.

"Get me to a telephone!" Keenan shouted. "There's a mess here that has to be straightened out quick."

To straighten out that mess kept the wires to Washington hot for several hours. Finally the truth came through. The War Department and the Department of Justice, in which the F.B.I. is a distinct bureau, are two separate branches of the government. Information coming into the F.B.I. indicated Betty Phillips might be an enemy agent. John Keenan had been assigned to investigate her. Instead, she had been a Military Intelligence operative!

Afterwards — "Then I wasn't really on the spot in that night club," Keenan groaned. "Carson and his two men just happened to come in there. When they saw me slipping out, they got curious and followed. Betty, darling, how can you ever forgive me! I thought you had put me on the spot!"

"How can you forgive *me?*" she quavered. "When Carson showed me the G-man badge he was wearing on Mars, I didn't know it was your badge that he had stolen while you were unconscious. He told me he was a G-man and that you were a spy. That was why I tried to warn him, why I betrayed you. I believed him. I just couldn't help it—"

"You don't have to ask to be forgiven," Keenan answered, grinning. "After we've both slept for a week, I'm coming to see you."

She changed the subject.

"But what about Thordon and Carson? They're still on Mars," Betty reminded him. "And with that horrible light projector, they can continue sending bombs to Earth. What can be done about them?"

Keenan sobered. "We don't need to worry about them."

"What do you mean?" Betty persisted.

"You remember, just after we landed in the munitions plant, a thumping sound seemed to come down the light beam?"

Betty nodded.

"You also remember there was a huge bomb in the light projector?" She nodded again. "Well, I took that bomb out of the projector and fixed it so it would explode when anyone entered the lab. That thumping sound was that bomb going off back on Mars. We don't need to worry any more about Carson and Thordon. That bomb blew those two fiends and their lab to kingdom come!"

Betty was silent. John Keenan put his arm around her. They were in the office of the munitions plant now. He led her through a door. Outside the dawn was near. A great red planet was sinking in the west. And with it was disappearing forever the fifth column of Mars.

SPORTS OF

by Leonard Gipson

Records are constantly being broken in the world of sports. Can this go on indefinitely? Will athletes of the future become supermen?

SO you think Chuck Venske, Jesse Owen and Joe Louis are hot stuff in the world of sports? There'll never be another man like Owen, eh? And certainly not another bruiser like the Brown Bomber?

Brother, as the saying goes, "you ain't seen nothin' yet!" Not even if you've seen Venske in action against that Kansas Kingpin, Glenn Cunningham. Believe it or not, the sports records now standing in this year 1940 will be pale pygmies in comparison with the year 2000 A.D.

THE RACE IMPROVES

War, famine, revolution and the Russian OGPU to the contrary, the stock of the human race continues on the upward trend. Despite everything, man's life expectancy today is greater than it ever was. Physical resistance, built up through hundreds of generations, can better cope with disease —if not poison gas. Minds are keener, more streamlined.

Yes, sir, your man of the 20th century may not be a half-Neanderthal brute, but he has better dental care, doctors are learning how to prescribe for him, and the chances are that he will live beyond the age-limit of his huskier grandfather.

The chances are, moreover, that in his own lifetime new sports records will be set such as Grandpa would have thought impossible, much less conceivable.

THE AWFUL TRUTH

The fact of the matter is, we're getting faster. Take, for instance, the Penn Relays. The same meet has been held in the same stadium for decades—yet all records have been shattered within the past four years.

Likewise is this true of the Drake Relays, the national collegiate meet, the national A.A.U. meet, and many others, some of them with fifty years' tradition. The reason for this astounding improvement is the ever-increasing stimulus of keener competition, greater athletic opportunities as a result of greater emphasis on sports—and the universal physical improvement of the human race.

During the late and not particularly lamented 1930s, there were more record-breaking performances than in the 1920s; every standard track and field record was shattered. But marks chalked up in the twenties also overshadowed those of the preceding decade.

Back in 1920, almost every track coach thought that athletic effort had reached its peak. When the pole vault record was hoisted to the then dizzy heights of 13 feet 5 inches in the 1920 Olympics, a 14-foot vault was thought impossible. Yet seventeen years later, two vaulters from the same university cleared 14 feet 11 inches! And last year, there were ten men in the U.S.A. who cleared better than 14 feet.

THERE'S MORE, FOLKS

For nearly twenty years, Ralph Rose held the 16-pound shot put record of 51 feet. Last year, eleven college men bettered that mark, and in 1935, Jack Torrence set the present record of 57 feet 1¼ inches. In 1939, Elmer Hackney of Kansas State, who has another year of eligi-

THE FUTURE

bility in college and is still improving, threatened Torrence's mark, not once but twice.

So what do we deduce from the above? We learn, on the basis of these shattered records over the past forty years, that in the year 2000, today's high-water marks are going to look pretty silly.

THE RECORD SPEAKS

EVENT	1900	1910	1920
100-yard dash	9.8 sec.	9.6 sec.	9.6 sec.
220-yard dash	21.2 sec.	21.2 sec.	21.2 sec.
440-yard dash	48.0 sec.	48.0 sec.	47.4 sec.
880-yard dash	1 min. 54 sec.	1 min. 52 8/10 sec.	1 min. 52 2/10 sec.
1-mile run	4 min. 15 sec.	4 min 14 4/10 sec.	4 min. 12 2/10 sec.
120-yard hurdles	15.6 sec.	15.2 sec.	14 4/10 sec.
16-foot shot put	46 ft. 7½ in.	51 ft.	51 ft.
Discus throw		145 ft. 2¼ in.	156 ft. 1 in.
Pole vault	11 ft. 9 in.	12 ft. 10 in.	13 ft. 5 in.
High jump	6 ft. 4 in.	6 ft. 5½ in.	6 ft. 7¼ in.
Broad jump	24 ft. 5 in.	24 ft. 11 in.	24 ft. 11 in.
Javelin throw		201 ft.	208 ft. 8 in.

BUT HERE'S THE PAYOFF

EVENT	1930	1940	2000 A.D. (est.)
100-yard dash	9.5 sec.	9.4 sec.	8.8 sec.
220-yard dash	20.5 sec.	20.3 sec.	19.1 sec.
440-yard dash	47.4 sec.	46.4 sec.	44.0 sec.
880-yard dash	1 min. 51 8/10 sec.	1 min. 49 6/10 sec	1 min. 44 sec.
1-mile run	4 min. 9 6/10 sec.	4 min. 6 6/10 sec.	3 min. 55 sec.
120-yard hurdles	14 4/10 sec.	13 7/10 sec.	12 sec.
16-foot shot put	52 ft. 7½ in.	57 ft. 1½ in.	70 ft.
Discus throw	169 ft. 9 in.	174 ft. 1¼ in.	230 ft.
Pole vault	14 ft. 1½ in.	14 ft. 11 in.	19 ft.
High jump	6 ft. 8¼ in.	6 ft. 10 in.	7 ft. 2 in.
Broad jump	26 ft. ¼ in.	26 ft. 8½ in.	29 ft.
Javelin throw	235 ft. 9 in.	253 ft. 4 in.	300 ft.

But hold on, you say. What about the Second World War? Won't that kill off a fine crop of athletes? Sure. And a rotten shame, too. But there'll be others to take their places—youngsters who were too young to be in the front lines, and who ducked into particularly deep concrete shelters when the bombers roared overhead.

Well, then, we agree that more records will be busted, perhaps in the next few years. After all, who would have thought it possible that in the 1935 Big Ten track meet, three world records would be broken by one man?

And what a man! Within forty-five minutes, Jesse Owen ran the 100 in 9.4, the 220 in 20.3, the 220-yard low hurdles in 22.6, and equalled the broad jump mark of 26 feet 8½ inches.

SOME BLANKET FORECASTS

How about the other sports—team sports such as football, baseball and the like? There is no adequate way of comparing the respective efforts of ourselves and the generations to come. But I'm going to stick my neck out and predict that the best of this year's athletic crop will be definitely inferior to the boys sixty years hence.

After about 1945, football will probably be de-emphasized considerably. Evidence pointing toward this trend is more than ample even now. Several prominent educators are today denouncing the results of over-emphasis, and for the first time they have receptive listeners.

Then too, this Second World War will have repercussions which will be reflected

in great economic and social changes. Naturally these changes will go to the heart of athletics. Coöperation in the military sense being closer today than ever before, our post-war athletes will be less likely to be "glory grabbers," but will go in more for "physical culture" for the sake of exercise and body-building. Future emphasis will be on mass athletics, not on individual tyros.

BASEBALL ON WAY OUT

Yet I look for a decline in certain purely team sports. Baseball, for instance. Nowadays the pitcher is allowed too much time between throws, and this will gradually exhaust the patience of the peppier coming generation. Softball, a speedier game, may yet displace our present national sports pastime.

The "class" sports—golf and tennis—should attain greater growth, since more and more people are finding out that these sports are not confined to the wealthier brackets. Tennis in particular will come into its own, once the old fogies now sitting on the lid are made to bow before popular pressure.

I am not saying that the present-day champions in these sports are on the whole unathletic; far from it. But they are opportunists. Their actual all-around talents compare feebly with the relative physical prowess of a decathlon champion, a weight lifter, a champion boxer or wrestler, or a standout football star.

By the year 2000, hundreds of golfers should break par where only one can do the trick in 1940. And by the same token, tennis, one of the best all-around games ever invented, will find a much wider playing audience.

MORE PREDICTIONS

Mechanical sports, such as airplane races, automobile and motor boat racing, as well as other mechanically invented sports, should attract the greatest crowds of all in 2000 A.D. No doubt there will be round-the-world air races, with the winner the Charles Lindbergh of his day. And mechanical sports records should reach unpredictable heights!

The year 2000 will find no millionaire professional boxing champs, such as the Dempseys, Tunneys and Joe Louises of today. People won't fall for that commercialized stuff sixty years from now. But boxing and wrestling will be more widely taught than ever in high school and college gymnasiums.

LEAD ON, ADONIS

There are those people who say that the world is getting "weaker and wiser"—without regard to statistics. They predict that man will be eventually no more than a living brain, as the globe becomes supermechanized and muscle functions decrease.

Horse feathers, brother, horse feathers! People will always admire a well-proportioned, clean-limbed, smooth-skinned human body. The Greeks, after all, had the right idea. Dieting will be more scientific. The girls will have come-hither figures without starving themselves to death and risking anemia and such. And their boy friends will have learned the secret of Apollo despite indoor work.

The most notable change will be abbreviated clothes. In summertime, people will wear only the minimum for respectability. No more hot collars, heavy leather shoes and suit coats. And as for exercise itself, many short-cuts or "systematic exercises" will have been developed to make body-building less complicated and more fun than it is now. In fact, many educators will testify that physical education is the best taught course in college today. When the year 2000 rolls round, it ought to be a pip.

A superhuman race? Absolutely—in 2000 A.D. Statistics prove it!

COMING SOON!
A BRAND NEW TIME TRAVEL STORY
By the leading teller of time stories in all science fiction
RALPH MILNE FARLEY
WATCH FOR IT! DON'T MISS IT!

Science Quiz

The following quiz has been prepared as a pleasant means of testing your knowledge of science and science fiction. We offer it solely for the pleasure it gives you, and with the hope that it will provide you with many bits of information that will help you to enjoy the stories in this magazine.

Count 2 points for each correct answer. If your score is between 65 and 75, consider yourself a charter member of our No. 1 I.A.A.W.C.—I Am a Whiz Club. If you score between 50 and 64, join our No. 2 I.A.A.W.C.—I'm Almost a Whiz Club. But if your total is below 50, you belong to the No. 3 I.A.A.W.C.—I *Ain't* a Whiz Club!

NO BEGINNING, NO END

In the various sciences many things occur in series. In the following list are ten such series, with the first and last terms omitted. Can you play both ends against the middle and supply the missing terms?

1. ...., blue, green, yellow, ...
2. ...., Saturn, Uranus, Neptune, ...
3. ...., Bryophyta, Pteridophyta, ...
4. ...., Proterozoic, Paleozoic, Mesozoic, ...
5. ...., Neon, Argon, Krypton, ...
6. ...., A, F, G, K, ...
7. ...., Metaphase, Anaphase, ...
8. ...., Retention, Recall, ...
9. ...., Smell, Touch, Hearing, ...
10. ...., Hydrosphere, Lithosphere, ...

RIGHT OR WRONG?

1. The constellation Hercules contains several strikingly bright stars and hence is easy to locate in the sky.
2. No railroad train or automobile could move without friction.
3. When two elements unite to form a compound, the properties of the elements, with the exception of weight, are completely lost.
4. Air is a compound.
5. At sunset, just as the last glimpse of the sun appears, its color changes from reddish-yellow to green.
6. It takes more pull to drag a brick-shaped block across a table top when the block is standing on end than when it is lying on its side.
7. Oxygen is slightly soluble in water. Were it not for this fact, aquatic life would be impossible.
8. A substance that produces no gas during combustion will *glow*.
9. Lead is the densest, the least active, and the cheapest of the useful base metals.
10. Stars twinkle, but the planets of the solar system do not twinkle.
11. There has never been anything found in meteorites which has not been found previously on Earth.
12. Hydro-electric power is much cheaper than power from any other source, because it exists as the free gift of nature and is in a very usable state.
13. Cold-blooded animals are those whose body temperatures fluctuate with that of the surrounding air or water.
14. Although the quantity of gold in sea water is enormous, the cost of recovering it has hitherto been greater than the value of the gold obtained.
15. Cobalt is similar to nickel and could be used instead of it for many purposes if a cheaper supply of cobalt were available.

HOW'S YOUR CIRCULATION?

The function of the circulatory system in human beings is to convey nourishment by means of the .... to all parts of the tissues of the body. The nourishment consists of .... obtained from the air through the lungs and of the nutritive substances derived from the .... we eat.

The circulatory system consists of two distinct sets of tubular vessels; one set conveys the blood from the .... side of the heart to the tissues of the body and is called .... After the blood has given up its nourishment to the tissues, it is conveyed back to the .... side of the heart by means of the ....

The other set of tubular vessels conveys the blood from the .... side of the heart to the lungs, where it gives up .... and obtains ...., and then back to the .... side of the heart, from which it is conveyed in the first set of blood vessels and then through the body again.

SCRAMBLED WORDS

1. An element .....GENSTUNT
2. Surname of a science-fiction author.....
.....SLAMILIW
3. Synthetic silk .....NONLY
4. A constellation .....BARIL
5. A continent .....TARCANTAIC

WRONG ALLEY

Strike out word that does not conform.

1. Lutecium, Zirconium, Rhododendron, Dysprosium, Argon.

2. Asia, Africa, Australia, Antarctica, Arctic.

3. Inch, Foot, Yard, Pole, Furlong, Mile, Minims, League.

4. Planet, Planetoid, Planetarium, Satellite, Sun.

(Answers on page 143)

Meet the Authors

JEP POWELL Author of
THE SYNTHETIC WOMAN

SIRED by a Baptist minister and raised by a devout Christian mother, I was purged early of any latent makings of a top-flight world-ling. It is with a deep sense of shame that I am unable to tell of rip-snorting escapades in far-flung corners of the world. I confess I ain't been nowhere and never saw nothing.

Like Malcolm Jameson, who occupied this coveted page in your August issue, my early days were spent in a lunatic asylum. I was born there. (Milledgeville, Ga., 1901.) I hasten to explain that my uncle was a doctor at the asylum, and Mother went there so I could happen in his bungalow on the campus. I was spirited away shortly after the event — a move my friends now regard as timely, and fortunate.

JEP POWELL

I missed my calling. I should have been an artist. I could draw creditable pictures before I could write legibly. In grammar school (public school down in Georgia), my talent began to lean toward caricature and satirical cartoons. My teachers unanimously discouraged my art.

World War No. 1 ended while I was in college, taking R. O. T. C. training and looking forward to becoming a "shavetail" in the army. Soon thereafter, I sallied forth to conquer the world. Since then I have made several desultory and unfruitful efforts toward the same goal.

After keeping books for a while and then selling pianos, I decided I should go into business for myself. Somebody had a restaurant for sale. I bought it. I had no experience in this line but possessed an incontinent appetite and thought the venture a good idea. In two months I gained fifteen pounds and lost $1,600.

My art began to itch. I failed to make the art department but landed in classified ads—Atlanta *Constitution*—from which vantage point I planned to work my way to the drawing board. It didn't happen. The great exodus from Georgia swept me into Florida during the real estate boom of the weird Twenties. While everyone else was making money buying and selling lots, I toiled away as a reporter, rewrite man and copy-reader on various Florida papers.

When the Florida bubble burst, I went to Chicago. I landed a copy-reading job on a daily racing paper, the day before I was fired from the *Herald-Examiner* copy desk for writing an unfunny "head" on a one-paragraph story about the Prince of Wales taking a ride without coming a-cropper.

The reason for having sought another job was a Damoclean sword over the heads of all the toilers around that hysterical desk. Being fired from the *Herald-Ex* instead of quitting at the end of the week served to keep my record unbroken.

For some reason I never quite understood, I became editor of the racing paper, then general manager. It was in the latter capacity that I saw my first horse race. It was in the same capacity that I okayed some cartoons for a racing weekly under my supervision. The cartoons were signed "Jep."

My paper folded because of labor trouble and a bitter battle with NRA. The labor trouble cost me a fairly lucrative job but it afforded me brief importance—I had a bodyguard.

After a short time in Cincinnati, I migrated again to Florida. Between newspaper jobs there I was a press agent, radio script writer, shyster commercial artist and advertising copy writer. Also I starved a little.

In New York, I've written free-lance factual stuff for racing publications.

Increasing deafness forced me to try fiction, an ability which I have long suspected. I wrote a detective novelet. It bounced. I wrote several short-shorts. They bounced. This story of an incubator girl is my first attempt at scientifiction

James Exam Powell, Jr., was the name under

(Concluded on page 142)

Cheap Love

"Here they come!" said Jim Doyle desperately. "Our only hope for escape is to outrun them!"

With Helen staggering beside him, Jim turned and fought his way through the green tangle of the jungle . . . fifteen savage native warriors racing in close pursuit, yelling like maniacs, waving spears and clubs!

If only Lani had not turned traitor, Helen and Jim would have been miles away. But Lani, the most beautiful creature who ever walked on two legs, had betrayed them. And Jim Doyle knew the reason why.

The native girl was willing to be marooned with him on an uninhabited island, but she was not willing to lose him to Helen Bishop!

Now, if they were captured, Lani would get her white man—and keep him!

Don't fail to read CHEAP LOVE by Robert Moore Williams! You'll thrill to its exciting action, native romance, South Sea glamour and daring adventure!

TURN TO PAGE 10

7 EXCITING STORIES of Adventure and Romance

★ **THE REVENGE OF JIM RAND—by Robert Leslie Bellem.** The name deserved the game, so Jim Rand threw in with Luweena when Kathie Vandoep gave him the gate.

★ **THE WOMAN WHO TURNED TRAITOR—by Alexander Blade.** Losing the woman you love isn't as bad as finding she's a traitor. It makes a man do reckless things.

★ **CANNIBALS' REVOLT—by Manly Wade Wellman.** When a mob of cannibals goes amuck, you haven't got time to sit down and wait for the Marines to arrive!

★ **TREASURE OF THE DEAD—by David Wright O'Brien.** Monte Mason had it all planned. Shawn would go to his death and Monte would get both his partner's wife and riches!

★ **MYSTERY TREASURE OF MARUTEA—by James Norman.** What reason was behind gangland's hijacking a movie star's yacht to make a raid on a remote island? See page 86!

★ **TROUBLE ON TUMOA—by A. R. Steber.** Dan McRane needed business to keep out of the red. But he didn't need the kind of business John Ahu had to offer . . . !

South Sea STORIES

Thrill-Packed AUGUST ISSUE Now On Sale

QUESTIONS and ANSWERS

This department will be conducted each month as a source of information for our readers. Address your letters to Question and Answer Department, AMAZING STORIES, 608 S. Dearborn St., Chicago, Ill.

Q. *Are infra-red rays visible, and if they are not, why are they called red? What is their position in the scale of wave length?—Edward Gadouas, Milwaukee, Wisconsin.*

A. Infra-red rays are invisible, like wireless waves, next to which they lie in the wave length scale. They are emitted by all hot bodies, electric arcs, etc., which accounts for their connection with the color red. Their wave lengths vary between about 0.018 inch, and 3×10^{-5} inches, which is the limit of visible light. Above that we come to the true "red" color, visible to the eye.

* * *

Q. *When we say "negative" or "positive" what distinction do we make, and how do we definitely designate which is which?—Frederick Pohlmann, Ishpeming, Michigan.*

A. The names "positive" and "negative" which are applied to electric charges are purely a matter of convention as to which kind of charge is indicated. The terms came into use in the early days of electrical experiments when it was found that a piece of sealing-wax rubbed with flannel attracts the flannel, but repels another piece of charged wax. Thus, the charge on the flannel was called positive and the charge on the wax was called negative.

* * *

Q. *Why does a nail, when hit with a hammer, get hot?—Roy Wright, Dorset Inn, Dorset, Vt.*

A. The answer to this, and all similar questions, is this: There is a transference of energy. This particular energy is an active form of energy known as "kinetic." It is measured by the product $\frac{1}{2}mv^2$, where m is the mass of the moving body and v its velocity. Suppose the hammer which hits the nail weighs 2 pounds and is moving 10 feet per second at the instant of impact. If the hammer stops dead it has lost $\frac{1}{2} \times 2 \times 10^2 = 100$ units of energy, and some of this energy divides itself up among the many particles in the nailhead and hammer, whose energy of random motion is thus increased. Another portion of the energy of the hammer has been used up in overcoming the resistance of the wood, or other material, into which the nail is fixed. Yet another fraction has been given to the surrounding air and dissipated in the form of the sound of the blow. Sounds are vibrations of air particles and are therefore a form of energy.

Q. *How do plants capture sunlight?—N. R. Nillson, Austin, Minnesota.*

A. A green leaf is a few cell-layers thick, and is traversed by veins, the transport system by which water enters the leaf and elaborated food is carried away. Their branching network provides for the effective distribution of water to all the living cells. The lower skin of the leaf is pierced by numerous openings—called *stomata*—so numerous that there may be one hundred thousand to the square inch. Through these minute openings water vapor flows out, and carbon dioxide flows in. They communicate with a system of air spaces in the leaf which allows a supply of the gas to reach every cell. The leaf-cell is the actual laboratory in which the upbuilding of food takes place; it includes, embedded in the living matter, numerous biscuit-shaped green bodies (chlorophyll corpuscles), whose function is to absorb and transform the light energy.

The flatness of the leaf means a large absorbing surface, and the arrangement of the leaves is suited to avoid mutual shading, and consequent loss of light.

To the leaf-cell, then, there flows water with salts through the veins, and carbon dioxide through the stomata and air spaces. In the cell there is an energy transformer and absorber, the chlorophyll. In the cell, too, there is protoplasm, the physical basis of life, which utilizes the raw materials and the energy of light, so as to transform the carbon dioxide and water into simple organic compounds of carbohydrate nature. In this process there is a liberation of oxygen, which passes out by the little openings. The formation of these simple carbohydrates is the fundamental process of plant nutrition, and indeed of life in general on our globe, for from them are derived all other organic compounds whatever, in animal as well as in plant life.

* * *

Q. *Is it true that the insect commonly known as the Earwig burrows into people's ears?—G. L. Barckley, Toledo, Ohio.*

A. Undoubtedly you are referring to the species of beetle known as the Dermaptera. This insect is an elongate beetle with a pair of heavy, plier-like jaws at the tail end of the body. However, it is entirely untrue that they burrow into people's ears, this being another of the myths attached to insects and other wild creatures.

DISCUSSIONS

AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brick-bats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

MRS. OWENS AND SON

Sirs:

Our boy has been reading AMAZING STORIES and *Fantastic Adventures* for some time. I read "Sabotage on Mars" and would like to see more stories by Maurice Duclos in your magazine.

MRS. A. L. OWENS,
Lomita, Calif.

We are glad to see that our magazines are becoming a family affair. We will try to keep both yourself and your son satisfied by presenting more stories by your favorite author. Many thanks for your interest in us.—Ed.

AMATEUR HOUR!

Sirs:

I was interested in seeing the mention in the July issue of AMAZING STORIES in "When the Gods Make War", and I appreciate your thoughtfulness in forwarding it to me.

My thanks—and kindest regards.

MAJOR EDWARD BOWES,
New York.

Apparently A. R. Steber has made the grade in AMAZING STORIES' *Amateur Hour.—Ed.*

COVERS

Sirs:

I think I can say that I am a veteran science fiction fan. I have been reading AMAZING STORIES ever since it was large size—and you know how long ago that was. I rarely write to a magazine, because I have little time for such a thing, and also because I feel that it's up to the editor to select the stories—not the reading public.

However, your last few issues have prompted some remarks from this corner. First of all, your covers: The May cover was frankly speaking, terrible, (and so was that spelling!). First of all, it was poor because it had no action. Then too, the colors didn't seem to blend very well. No more of Hartman, please. The June issue, now, was a definite improvement. Very good for Krupa's second attempt. Very good issue, by the way. Shades of Paul, Dold, Wesso, and Morey! What a cover by Fuqua! Frankly, I have never seen the equal to the July illustration. Tell me, is there any way of getting the original? All right, then we can score two commendable covers in a row. But yesterday, when I went to my favorite newsstand to get the latest ish, what did catch my roving eye so suddenly, but the new combination cover by Krupa and Morey! I have always maintained that if Morey wasn't so "individualistic" (as the editor says), he would be the ideal artist. So what does ye olde ed do but get Krupa to retouch and smooth out Morey's illustration, and thereby create the finest space war scene ever drawn in the history of stf! Congratulations a thousand times!

Your story quality is improving with every issue. More and more top notch authors are presented in each issue. Then, too, you are responsible for Don Wilcox, who in my opinion, is now one of the top ranking authors in stf today. While we're on the subject of authors, here are my favorites: M. Jameson, T. Ayre, D. Wilcox, E. Binder, M. Wellman, E. Hamilton, R. Farley, R. Rocklynne, F. Pragnell, L. Manning (who has been out of print for quite some time now), A. R. Steber, M. Kaletsky, and a host of others.

JOE A. RIPA,
100 Warner St.
Newport, R. I.

You aren't quite right when you say it's up to the editor to select the stories because the opinion of our readers counts greatly in the policy your editor pursues when he reads the manuscripts on his desk.

We are sorry that the May cover didn't "go" with you, but we don't understand what you mean by saying the spelling was terrible. We've looked at the cover until our eyes ache and can't find anything wrong with the spelling. However, we are greatly pleased to discover that the next three covers made such a hit with you. There is a way of getting the original. Watch our next issue for announcement regarding these cover paintings.

Stories by your favorites, with the exception of Mr. Manning, are scheduled for the near future. Mr. Manning, we understand, is quite a busy man these days, and no longer writes science fiction.—Ed.

BAFFLING SIMPLICITY!

Sirs:

Congratulations to you on the success of your most recent contest and the innumerable scores of honorable mentions it necessitated, besides the

Camera Fans!

MAKE YOUR VACATION PAY BIG DIVIDENDS

IF you want to travel during your vacation this summer—if you want to have a lot of fun and be paid well for having it—then don't fail to read *Travel Pictures Pay Your Way* by H. Donald Spatz. This industrious amateur photographer of Reading, Pennsylvania, tells how you, too, can take fascinating travel pictures that sell. You'll find this timely article on page 34 of your August POPULAR PHOTOGRAPHY.

★ **POPULAR PHOTOGRAPHY** can help you get the most out of your camera this summer. The August issue is bubbling over with vacation talk . . . helpful hints that will make your shutter finger twitch! Expert photographers tell you how to plan your camera vacation; avoid common mistakes; take dramatic urban shots; film the youngsters; capture garden, marine, and desert pictures. Yes, camera fans, you're missing too much if you miss the big, colorful August issue!

EXTRA! Cavalcade of Color!
4 PAGES OF BRILLIANT NATURAL COLOR PHOTOS

Popular Photography

AUGUST ISSUE Now On Sale At All Newsstands and Camera Stores

regular prize winners. Is it not amazing—the number of readers who participated and answered correctly, in differing degrees, the remarkably difficult problem placed in their jurisdiction? Imagine the brain-work it must have taken—and the concentration—in order that they might all arrive at the same world-shocking, original discovery! Eureka!!! One that's only been stereoscoped, in the duration of science fiction, from at least four-score and thirteen slightly varying, but nevertheless, like angles. Again—I congratulate you on your Beautiful Baby Contest!

Sour Grapes of a surety! Quoting the unquoted Sage of Shanghai—and points North—might I suggest I am deserving of same? Your mistake, RAP, and Mine. Yours for not making it clearer to the readers what you wanted, instead of subtly suggesting that they strain a membrane finding a new angle for the ending; my mistake in thinking—I should just stop at that trite phrase—you were looking for mutations in a sane, biologically catalogued and thus equally boring world of repetition. Thank heaven, however, that I didn't have anything startlingly revolutionary. I don't believe you could have stood the shock! Warning: don't ever visit Saturn's seventh circle, 'cause ooh! What I saw there! Well, that bunch of grapes of wrath put through the wine press to my utmost satisfaction, I'll invite you to have a drink on me.

Being a very busy (dreaming) fille-de-Michael-angelo, I don't know why I waste my time and my very brilliant personality on just you, seeing as how I fully realize that you cannot print this in Discussions for fear of the wrath of each and every prize winner and honorable mentioner in July's issue, especially not after that neat little item of prodigious flattery in the June issue concerning the "many hundreds of readers who were extremely clever fellows". It wouldn't do at all to disillusion the multitude, would it? But you and I, being among the few truly great, can bear the truth, or can we?

Being me, I can't exactly rave about any of your stories since I recall none at present worth raving about, but they must be good because a mite of Scotch in me prevails over anything I consider as inferior quality. All my back issues being at present in circulatory demand, I don't dare praise the one story that really impressed me enough to remain in memory through all the filtered and unfiltered literature I absorb as needed daily vitamins. Wouldn't it be dreadful to exalt your competitors after the mortar-compound I tossed along with my bricks already? With you as weak as a microbe in molasses, due to previous assault, the law pertaining to the survival of the fittest just couldn't apply itself properly to your case.

One fact I do find most amazing is how artist-conscious all the fans are. I still wonder whether it is that they are just looking for some fly paper to set out for the editors, or do they really notice and care, after a certain grade of art is attained?

I could understand their objection to anything atrociously executed, but darned if most of them aren't displeased with something that strikes my artistic eye as being a really masterful display of technique! Puzzlement?

'Nuff said, except that you can't keep a good girl down, so some of these days I'll up and write a tale of TT myself and there won't be any ebb-teasing connecting it to other plots either. I'd like to argue with RMF or Lopez on the point the latter stressed, of the impossibility of George meeting himself, because much as it would be against the law of physics and against the creation of matter from nothing, there WOULD have to be a certain merging point at which George would have to meet himself! Impossible? No more so than this particular conception of time travel, to my notion, in the first place. Anyhow, hold your breath until my TTMutation arrives, as perhaps your predecession may soften the hearts of those who come after towards me and my ambitions. And anyway, why should I worry about anything like this when it is to my intentions to be the first human being to soar aloft a million, or maybe two. Who would care to back me? Well, like Fulton, all I need is backing (down).

See you in Esquire then, as soon as synthetic hormones of sufficient strength are perfected to such a degree that you will be allowed to choose the sex desired of yourself; since the absurd prohibition of anything under the feminine gender is prevalent at present as unscalable crags to we of the weaker sex. Until then, I remain

As the Saturn Sass-Box,
MARIJANE NUTTALL,
Patagonia, Ariz.

P. S. "He brought it on himself, Miss Twiddle" —RAP, you did! But that twit about the "hundreds of entries" failed to give the correct answer or to even suspect the fate of George Worthey. Here you have one of the reasons why this entry, at least, didn't suspect such simplicity either of RMF or of AMAZING.

S.(A.)P. And am I happy now!

We really are sorry that our contest was so simple that you missed the boat by working too hard on it. However, we don't agree that the reason for your not making the grade is due to simplicity in the contest. It may be that you are just a bit more clever than the average reader and judging from your letter, you might have shown Mr. Farley a few angles in time travel that he never thought of.

We have a new contest coming up which ought to be right up your alley, so to speak, and we promise you won't have that element of baffling simplicity.

Your comment on our artists is interesting. Our art work gets a great deal of comment and we think it proves that our artists are the best in the science fiction field.

We certainly don't want to keep a good girl down, and if you ever get around to writing that

LOOK OUT BELOW!

It's open season over there

. . . bombers are going to town literally and colloquially over war-torn Europe! In an authoritative article, James L. H. Peck, author of "Armies With Wings," brings you an up-to-the-minute account of modern bombing operations: methods of bombing; types of "eggs" used; charting the attack; sights; and types of bombers. Read this great article and you'll know why the modern bombing plane and the "eggs she hatches" upon military and helpless alike make her more to be feared than any of man's weapons. This is just one of the timely articles on aviation you'll want to read in the

August Issue

FLYING AND POPULAR AVIATION

ON SALE AT ALL NEWSSTANDS

FREE TRIAL OFFER

New Remington Deluxe Noiseless Portable!

AS LITTLE AS 10¢ A DAY

The new famous Remington Deluxe Noiseless Portable that speaks in a whisper, is yours for only a small deposit and terms as little as 10c a day. Brand new. Standard keyboard. Automatic ribbon reverse. Variable line spacer. Touch regulator, and all the conveniences of the finest portable ever built. Act now. Send for catalog full details TODAY.

YOU DON'T RISK A PENNY!

Write to Remington Rand, Department 165-9, 465 Washington Street, Buffalo, N. Y.

travel story, we would like to see it. And so, we believe, would Mr. Farley. We certainly don't prohibit feminine writers. We buy stories, not personalities. Incidentally, would you please write us again and tell us where in the heck Patagonia, Arizona, is? We thought it somewhere in the South Sea Islands.—Ed.

CYCLONE CORRECTION

Sirs:

In your July 1940 issue of AMAZING STORIES on page 75 you refer to a cyclone as a "funnel-shaped cone of whirling air". This is a slight error.

Quoting from College Geography by Case and Bergsmark, copyright 1932, I find that cyclones are "characterized by large areas of low atmospheric pressure in which the air flows spirally inward and upward". From this definition, we can see that a cyclone covers a large area of "2,000,000 square miles—average size".

The picture you present is that of a tornado, which lasts but a short time and doesn't cover as large an area as that of the cyclone.

The tornado has a reduced pressure near the center of nearly three-fourths normal and hence as it "passes buildings, the roofs, walls, and windows may be blown out as a result of the excessive pressure on the inside of the building as compared with that on the outside".

The cyclone approaches gradually and travels from 500 to 700 miles a day, while the tornado comes up suddenly and dies out quickly. It gives only a very slight warning of its approach.

"Tornadoes are associated with well-marked lows (cyclones) in which both the temperature and relative humidity are high". Every storm we have in the United States is a cyclone, but only the funnel-shaped ones are tornadoes.

ELIZABETH M. DOWNY,
State Teachers College,
Glassboro, N. J.

Many thanks for setting us straight on cyclones. We pass your correction on to our readers with profuse apologies. We should have known better. —Ed.

HEAD OF THE CLASS

Sirs:

Before I go any further with this letter, I want to say that I am only fourteen years old, which will probably put this letter in the waste basket. But if you decide to read on, I want to say that I think this magazine is very good.

I have been reading science fiction since I was eleven years old and have been reading this magazine and its companion magazine, FANTASTIC ADVENTURES, since it came out, for over two years. This winter I stood at the head of my freshman general science class all year, and I can safely say that I owe it all to science fiction magazines.

Stop your machines, because here come the monkey wrenches.

My most important criticism is this (hand this to the editor of FANTASTIC): In some of your issues I occasionally find a story such as one in which there is a modern muscle-bound super hero who takes a tremendously heavy battleaxe and goes off to a secret land, of which only he of the modern world knows, which is equivalent in civilization to the middle ages, and with an axe in one hand and a beautiful girl in the other, indifferently goes about killing off medieval villains, with Heklos, or slaughtering monstrous octopi. This type of story is very good, BUT IT HAS NO PLACE IN A SCIENCE MAG. Criticism No. 2: Long-winded scientific definitions. Now, let me make myself clear. My age has nothing to do with my ability to understand them. I can keep up with the best, but take it from a bookworm, a long-winded technical definition is, in my mind, taboo. In the first place, they get so boring that I just let my mind wander while I'm reading it and consequently have to read it over four or five times before I can force myself to concentrate enough to get the meaning. Ofttimes they get so bad that I throw up the whole story.

I disagree with Walter F. Williams in the July issue about bringing cartoons into your magazine. I think that no matter how much you strive, a serial cartoon will eventually take on the earmarks of a cheap movie serial.

ROBERT A. RIGGS,
Canton, Mo.

As you see, your letter didn't go in the waste basket. And giving us credit for your standing in class makes us feel pretty good. After that, we can take the monkey wrenches. We admit that sometimes we have what you term muscle-bound heroes because our readers like action with their science, but we don't agree that we have long-winded scientific definitions. Are you referring to our footnotes? When science occurs in a story, we try to remove it to speed up continuity and for those readers who demand to know the theory behind the story, we replace the information in footnote form.

Other readers have confirmed your opinion regarding comic strips.—Ed.

QUALITY!

Sirs:

The quality of your July issue saved you a customer; namely, myself. First, the cover was one of the best I've seen since around June or July of 1939, being attractive and interesting without such a lavish use of clashing colors. Except that the planes are the recent Boeing B-17B's of the Army instead of more advanced types as they were supposed to be, everything was swell.

As a general thing, the stories were above par. "When the Gods Make War" was well done and surprising, and Steber is a fellow to be watched, it seems. Adam Link scores again, as usual, coming in with second honors mainly because I've seen a little too much of him lately. Don Wilcox did himself proud, and Malcolm Jameson touched up a rather old idea. Thornton Ayre somehow

didn't click, for once, but "Secret of the Moon Treasure" will probably rate high in the polls. Down at the bottom, then, we find Kaletsky's screwy-professor yarn, and that finishes up the issue.

Another thing in favor of your July book was the back cover by Paul and the explanation on the inside by Henry Gade. Keep up the good work, for you haven't yet touched the moons of Jupiter and Saturn, which would give you a score or more subjects to work on. I once brickbatted Henry Gade, but I'll wager his work on these planetary articles have given him a reference background for a nice story. Since he redeemed himself after my derogation, I'm ready to receive him with an open mind. How about it?

ALBERT MANLEY,
1628 N. Abingdon St.,
Arlington, Va.

The July cover received more fan mail than any other cover this year. Mr. Fuqua will be pleased to know that he has scored so well.—Ed.

WHAT ABOUT F.A. NOW?

Sirs:

There are no really outstanding stories in the July AMAZING STORIES. First place lies between "When the Gods Make War" and "The Monster Out of Space." Both are sadly weakened by undue stress on love-interest and melodramatic action. Kaletsky's farcical fantasy is amusing.

The most interesting portions of the issue are Steber's amazing autobiographical sketch, and Kent Casey's letter on Lemurian data.

The cover is highly satisfactory, except for the printing. Even the colors are reasonably realistic. Congratulations!

The Earthman as Seen by Mars on the back cover is entertaining and fairly plausible.

The magazine as a whole is still too much like its companion, *Fantastic Adventures*, but I continue to read it!

D. B. THOMPSON,
3136 Q St.,
Lincoln, Nebr.

We don't quite agree that AMAZING STORIES *is too much like its companion,* Fantastic Adventures. *The latter magazine stresses fantasy, whereas we stress science.—Ed.*

NEW AMAZING 2 YEARS OLD

Sirs:

The latest issue of AMAZING STORIES I now have before me, the July 1940 one, and because it is the last one in the second year of your management, it seems no more than proper to hand out a few congratulations.

Last night I relinquished the time I would have spent writing you to glance over the 24 magazines that have proved that the worst can become the best, and in a short time. From the awful first issue on up through the Krupa and Fuqua era, into the Paul, Morey and better stories period, and now into a slight slump of the past few issues. Faulty chopping of illustrations, poor artistic work and an almost utter lack of science in the stories

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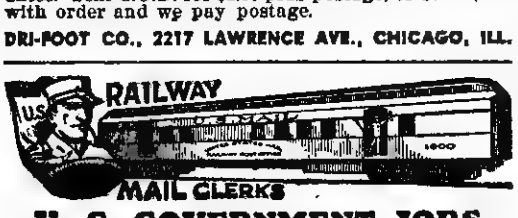

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are the causes of this slight depression, but the manner in which you dragged the magazine out of the mire in '38 gives hope of a slightly improved format in the near future.

Fuqua's cover was faultless and quite unlike his earlier amateurish work. Steber's yarn was not a new idea, neither was it stf., merely adventure. His serial was much better. Adam Link again, and a good story too. Only fault I can see is why a robot should want to be human, of all things. He picked the least intelligent of the animals to mimic—humans are no prize. Binder proved his inhumanity by having him piously accept the friendship of that rat, Bart Oliver, after all the unfair things the reporter did. It would be an unusual human being who could take so many cheek-slappings and still come back for more without the slightest thought of revenge. Certainly not myself.

Wilcox scores again with "Mirrors of Madness," a story with science and logic and good mystery. Its Krupa illustration was No 2 of the pics, and it was No. 2 of the stories. The best story was Jameson's tale of the spaceways, the only other real science story in the magazine. The destroyer was something new in this field and it was realistically described by the author. Paul's drawing for this, the best in the issue, and I still like the full page, framed pic.

The short was clever humor and also introduced a coming artist in the form of Panak We should see more of him The final story by Ayre was one of his poorest, I think, hardly comparable to his "Locked City" and the others It rambled all over the place and gathered all of the loose ends into one grand knot at the end, just like a poorly written melodrama

CHARLES HIDLEY, E5,
New York City.

Thornton Ayre is working on a story called "Mystery of the Martian Pendulum," which we promise you will outdo even "Locked City."—Ed

QUIZ CORRECTIONS

Sirs:

In your IQ Test of May 1940 there are two things which I should like to point out to you:

1. In question 2, in addition to the new moon not rising in the evening, it is invisible. Nobody ever "saw" the new moon; it is dark. The full moon can be seen

2. In question 4, besides not being able to howl, a giraffe does not "leap upon its prey" because it has no prey. Giraffes are herbivorous and it is unnecessary to "leap" on leaves and grass.

I hope these criticisms will be received in the spirit in which they are offered. I enjoyed very much reading your magazine.

DAVID WEINER,
503 E. 4th St.,
Bloomington, Ind.

There is an old saying which runs something like this: "A new moon in the old moon's arms." Scientifically this is true, and the new moon really can be seen even without the aid of a telescope.

It is visible by means of reflected light from the surface of the earth.

We agree that a giraffe does not leap upon its prey.—Ed.

ILLUSTRATORS

Sirs:

I have been reading AMAZING STORIES for about a year and a half now and still think Krupa and Fuqua are your best illustrators. Others such as Morey, Jay Jackson, Hartman, Hammond and your recent illustrations by Paul are fairly good, but have faults. Your July issue's back cover by Paul and (I hope) the coming Paul illustrations are fine; keep them up. Fuqua on the July issue's front cover is really superb—don't dare let him go.

Here is how I rank the June issue of AMAZING:

1. Slave Raiders From Mercury.
2. Warlords of Mars.
3. The Mathematical Kid.
4. Trapped on Titan.
5. Planet of Black Terror.
6. Treachery on Planetoid 41.

I think your departments are fine, but too few; shorten some of your stories and make room for other departments and features such as scientific articles.

MARVIN GOLDENBERG,
1382 Goodfellow,
St. Louis, Mo.

We publish your ranking of the June issue because it is nearly correct. An analysis of reader comment reveals that "Planet of Black Terror" is not fifth, but second, and the other stories rank in the order in which you have listed them.—Ed.

"SLAVE RAIDERS" FINE

Sirs:

My heartiest congratulations to Don Wilcox for his fine story "Slave Raiders From Mercury." But it was the only good story in the whole June issue. I had resolved that I was going to pass up AMAZING STORIES this month because of the low grade of stories published lately, but I got a good look at the front and back covers by Julian Krupa and I couldn't resist buying it and looking further, for Krupa is my favorite artist, or illustrator of science fiction.

To improve your magazine I suggest a longer novel each month -I mean about half of the magazine, written by a good author like Williamson or Binder, and only have about two or three short stories. I know it is against your policy or custom, but it would improve your magazine immensely by cutting out some of your short stories that haven't been good since 1939.

I would very much like to see Polton Cross return with a nice long novel in the next issue. Other names I would like to see on the contents page are Thornton Ayre, R. R. Winterbotham, Robert Bloch and Miles J. Breuer.

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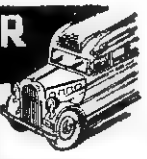

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FRANK PATTON

MEET THE AUTHORS

(Concluded from page 132)

which I was originally launched, but my father died before I was a year old, eliminating the necessity for the "Junior". I dropped the "Exam" as soon as I was old enough to rebel against silly family names. I've been called James, Jimmy, Jep and a lot of things I'd blush to repeat.

I've been married—spasmodically, you might say—for ten years. But it is always the same girl. I am the last male of my line of Powells and, so far, have accomplished nothing toward perpetuating the breed. I'm not terribly perturbed about it, though. In these troublous times, it's even a comfort. I wouldn't want to raise my boy to shoulder a proton gun.—*Jep Powell*

CORRESPONDENCE CORNER

M. Korshak has moved to 3156 Cambridge Ave., Chicago, Ill., and still has a variety of magazines for sale . . . Gene Autry, Box 5674, T.C. Station, Denton, Texas, has a very large private collection of all SF magazines from 1924 up to present day, which he is offering to sell in part or whole; must have immediate replies . . . Leo Black, 2912 Market St., Wheeling, W. Va., is desirous of correspondents of either sex about 17 years old . . . Jack Townsend, Box 604, Wilson, N. C., wants to subscribe to a good fan magazine . . . Robert Raffety, 911 E. 42nd Pl., Chicago, Ill., is 20 yrs. of age and would like pen pals from any part of the world; especially those interested in stamp collecting . . . Charles Biggs, care Mrs. Roberts, 407 E. Eden St., Baltimore, Md., would like those owning a series of science fiction books to write and quote prices, if they are for sale . . . H. Heditch, 43 Froddington Road, and R. Clark, 14 Frensham Road, Portsmouth, England, would like pen pals from all parts of the world . . . J. Gordon, 288 W. 92nd St., New York City, would like to purchase science fiction magazines; name prices . . . Harry Peterson, Jr., 2221 Carmen Ave., Chicago, Ill., is 16 yrs. old and would like to correspond with those from 14 to 18 yrs. whose hobbies are bike riding, picture postcard and stamp collecting . . . Mrs. Wm. Johnson, Route 1, Box 87, Kenosha,

Wisc., has back numbers of AMAZING STORIES and other SF magazines for sale . . . Arthur L. Widner, Jr., Box 122, Bryantville, Mass., would like all fans within a fifty mile radius of Boston who are interested in joining his newly founded Stranger Club to communicate with him for further details . . . Everett P. Bleiler, 58 Round Hill St., Jamaica Plain, Mass., wishes to dispose of duplicates to his science fiction collection . . . Joseph M Lewandowski, Jr., 17 Riverview Rd., Brecksville, Ohio, is organizing The Ohio Fantasy Association and would like all Ohioans interested to write him, enclosing a three cent stamp for reply, which will give full details . . Alfred Edward Maxwell, 648 S. Main St., Opelousas, La., would like to organize a science fiction club in his vicinity, and is anxious to hear from anyone interested in Astronomy, Photography, Biology, Sports. . . . .

QUIZ ANSWERS

(Quiz on page 131)

NO BEGINNING, NO END

1. Indigo, orange. (Part of the spectrum)
2. Jupiter, Pluto (Extra-terrestrial planets)
3. Thallophyta, spermatophyta. (Classifications of plants)
4. Archeozoic, Cenozoic. (Eras of geologic time)
5. Helium, xenon. (The inert gases)
6. B, M (Principal spectral classes of stars)
7. Prophase, telophase. (Stages of mitosis)
8. Learning, recognition (Divisions of memory)
9. Sight, taste. (The five senses)
10. Atmosphere, centrosphere. (Four spheres composing the Earth)

RIGHT OR WRONG?

1 Wrong. 2 Right 3. Right. 4. Wrong. It's a mixture 5. Right. 6. Wrong. It takes about the same pull for both cases. 7. Right. 8. Right. 9. Wrong. Iron is the cheapest of the useful base metals. 10. Right. 11. Right. 12. Wrong. 13. Right. 14. Right. 15. Right

HOW'S YOUR CIRCULATION?

Blood, oxygen, food, left, arteries, right, veins, right, carbon dioxide, oxygen, left.

SCRAMBLED WORDS

1. Tungsten. 2. Williams. 3. Nylon 4. Libra. 5. Antarctica.

WRONG ALLEY

1. Rhododendron the rest are elements.
2. Arctic—the rest are continents
3. Minims—the rest are units of linear measure.
4. Planetarium — the rest are astronomical bodies

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LIFE ON EUROPA

(Moon of Jupiter)

By HENRY GADE

Artist Frank R. Paul's imaginative conception of the form of living being that might exist on Europa is depicted on our back cover in color.

EUROPA is the smallest of Jupiter's four major satellites, being 1,865 miles in diameter, which makes it smaller than our own moon. Its gravity would be quite negligible to Earth muscles, and a man from Earth could leap fifty-five feet into the air as easily as he could leap six feet on his own planet. Added to this might be the gravity attraction of Jupiter, because of its nearness. Europa is only 416,600 miles away from its giant parent body, or not quite twice the distance of Earth's moon from Earth. It is the third closest of Jupiter's nine-satellite family.

It has a sidereal period of 3 days, 13 hours, 13 minutes, 42.05 seconds. Its inclination of its orbit to the planet's orbit is 3 degrees, 5.8 minutes, which gives it quite a complicated array of seasons. Its eccentricity is slight, however, being only 0.0003, which is the least of all the Jupiterian satellites save Io which has none at all.

From these meagre figures, and with the use of a bit of logical imagination, we can visualize the surface of Europa.

The terrain of Europa can be deduced to be quite irregular, and level areas would be rare. Although volcanic activity would be more subdued than on its three larger sisters, yet the stress of the many varied masses of the Jupiterian system would tend to cause strains which would open deep seams in the surface and cause periodic eruptions.

There would be little vegetation due to the extreme variety of temperatures and the disparity of seasons.

A lack of moisture would indicate little in the way of weather change beyond fluctuations of temperature. Rainfall would be an extreme rarity indeed, and precipitation of dew would be the only appearance of water on the surface.

The atmosphere would be rare, and possibly remarkably clear and free from impurities. Gases might be present during eruption periods, but poisons would otherwise be lacking. An Earthman might be able to breathe it for a short time with no more ill effect than breathing the air atop a high mountain.

The terrain would be mostly jagged and split rock, with occasional areas of sand.

From these deductions we may picture the kind of life we would have reason to expect might exist on this faraway world circling Jupiter.

The Europan stands perhaps three to four feet in height, and his body is light and flimsy in comparison to our own.

He is constructed along the lines of an insect, with a hard, light, chitinous shell to protect him from the rapid temperature changes of the whirlwind of seasons in which he lives, both solar and planetary.

He is equipped with feet and hands which are admirably adapted to scrambling about the rocky terrain of his world, and he has sharp claws and talons. His claws are powerful and dangerous.

Like the inhabitants of Mars, he has an enormous lung development which makes him barrel-chested. He is armored thickly to protect his delicate body construction.

Ears and eyes are so constructed as to allow for covering by means of movable membranes for protection when not in use. Ears open wide to catch sound waves in the rarefied air, then fold down over the delicate drums when the Europan does not desire to hear. His eyes can also be closed by means of opaque lids of chitin for protection against injury by rapid temperature change.

Due to light gravity, the small Europan could erect comparatively huge dwellings fashioned from solid slabs of lava, built in fantastic architectural design.

His cities would be small, located near the rare sandy pockets where the only possible vegetation can exist. Europans would not be found in great numbers, but in small communities of only a few hundred members each.

Life would depend on the cultivation of the vegetation, which would be a highly specialized type. Only a type almost entirely edible would be practical to cultivate.

Farms would consist of intensive concentration in sandy areas, watered from below by deep-sunk wells and underground irrigation by means of pipes or crystal tubes made from sand.

Each individual plant would be covered by a crystal protective cup, to prevent any evaporation, and to guard against temperature variation.

All in all, the life form of Europa would find itself battling constantly for survival against the elements, and natural enemies might be limited to lizards that prey on the Europan farm.

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He turned a lever, thrust the valve open, and with Mat Pender beside him sprang into the lock. The first thing Harding saw was a murderous little electromatic leveled at his heart. Then he heard Pender's grunt of surprise, and for the first time realized who his opponent was . . . a girl in a heat-suit, with the transparent hood thrown back over her shoulders.

"Put them down, boys," she snarled. "Guns won't do you any good!" It was the same girl Harding had seen a week before in Fred Dain's office. Now she stood at the airlock of their cabin brandishing an electromatic in each hand!

There was no evidence of surprise in her cool glance. Frowning a little, she said, "That's it. Put 'em away and we can talk!"

Who was this pint-sized wildcat? Why did she come 180 miles in a ravaging bluestorm "to talk" with Harding and Pender? What grim fate was in store for these two medicine farmers of Planetoid 31? Was this part of Fred Dain's trickery? Read WORLD WITHOUT AIR . . . a fascinating story by Henry Kuttner.

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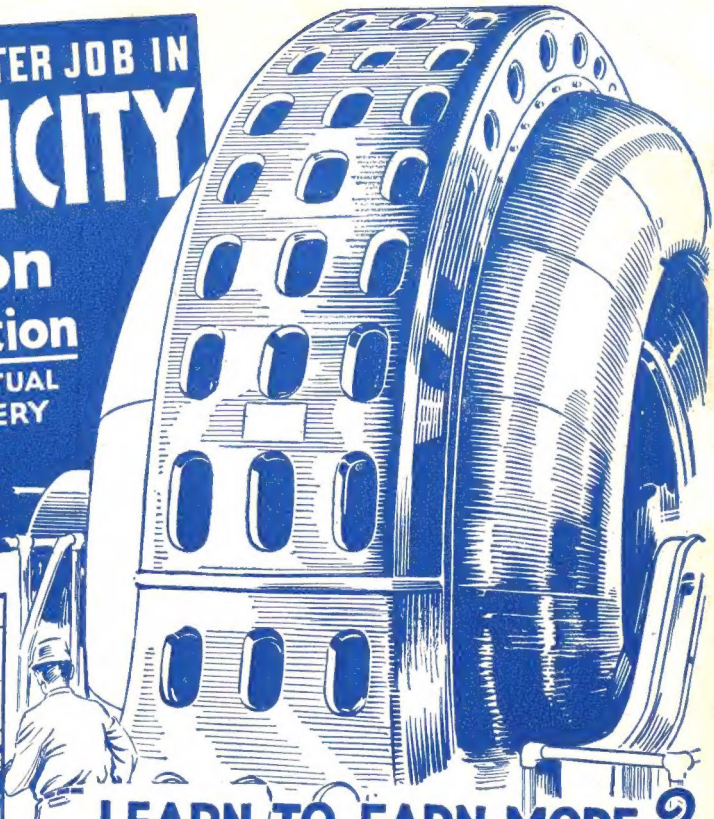

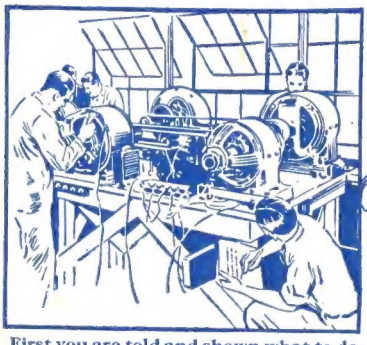

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LIFE ON EUROPA
(MOON OF JUPITER)

This member of the solar system is only slightly smaller than Earth's moon. Science knows little about it, and thus, lacking conclusive observation, our artist pictures its life in imaginative style. (See page 144 for details.)